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WESTERN AMERICANA

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FORT YUMA, COLORADO RIVER.

PERSONAL NARRATIVE

OF

EXPLORATIONS AND INCIDENTS

IN

TEXAS, NEW MEXICO, CALIFORNIA, SONORA,
AND CHIHUAHUA,

CONNECTED WITH

THE UNITED STATES AND MEXICAN BOUNDARY COMMISSION,

DURING THE YEARS 1850, '51, '52, AND '53.

BY

JOHN RUSSELL BARTLETT,

UNITED STATES COMMISSIONER DURING THAT PERIOD.

IN TWO VOLUMES, WITH MAP AND ILLUSTRATIONS.

VOL. I.

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PREFACE.

In submitting to the public an account of my explorations during the several years that I filled the place of Commissioner on the part of the United States, for the Survey of the Boundary between the United States and Mexico, I have endeavored as far as possible to confine myself strictly to what is embraced in the title, viz., a Personal Narrative of Explorations and Incidents.

Having this idea constantly before me, I have admitted only such digressions as seemed absolutely necessary for a full understanding of the subject. Short descriptions of the towns visited have been given, as well as general remarks on the country from time to time. So of the botany and zoology, I have endeavored to keep before the reader a correct idea of the character of the country throughout which he was to follow me, without lists and descriptions, scientific or otherwise, of every plant, quadruped, bird, and reptile that came in my way.

As an itinerary giving an accurate description of the country from the shores of the Atlantic to the Pacific—of every day's journey—of every stream, lake, pond, or spring—of all the mountain chains and their defiles—of every plain and desert—of the towns, villages, houses, ranchos, and farms where the traveller may obtain supplies—of spots where he may find grass for his animals, and where he can find none—of districts destitute of wood and water—I have endeavored to make it particular and accurate, in order that my book may become a useful guide to emigrants and other travellers. A vast deal of suffering may be saved by placing in the hands of emigrating parties a guide across the country to the golden regions of California, whither so many are now annually wending. The time is not far distant, either, when crowds as large as those now pressing on to California and Australia will be "prospecting" among the mountains of Texas, New Mexico, Chihuahua, and Sonora, attracted by similarly rich mineral deposits, and probably with the like splendid success. This will not be the result of an accidental discovery, as was the gold in the mill-race near the Sacramento; for the existence of such treasures is already known, as well as the localities where they are to be found. My journeys through

Sonora, Chihuahua, and other Mexican States, are given with much detail on the topics mentioned; which I fear will render this itinerary dry to many, although to others it will give the book its chief value.

I have divided my narrative into distinct journeys, each complete in itself. The first is from Indianola, on the coast of Texas, where the Commission disembarked, via San Antonio and the northern route (not now travelled), to El Paso del Norte, about 850 miles. A second to the Copper Mines of New Mexico, in the Rocky Mountains near the Rio Gila, with a residence there of several months. A third to the interior of Sonora, and back. A fourth from the Copper Mines along the boundary line south of the Gila to the Rio San Pedro, and thence through another portion of Sonora to Guaymas on the Gulf of California. Fifth, a voyage from Guaymas to Mazatlan and Acapulco, and thence to San Diego, and San Francisco. Sixth, various journeys in California. Seventh, a journey from San Diego, by the Colorado and Gila rivers, to El Paso del Norte. And lastly, a journey through the States of Chihuahua, Durango, Zacatecas, New Leon, Tamaulipas, and the south-western corner of Texas, to Corpus Christi on the Gulf of Mexico. These several journeys embrace an extent of nearly 5,000 miles by land.

With reference to the aboriginal tribes, I have described with minuteness only those with which I remained some time, and whose habits I had a good opportunity to study. I have also incidentally spoken of the tribes through whose countries I passed, without entering into any detail. This subject is so extensive, and requires so much study, that it can be done justice to only by being treated as a whole. I was so fortunate as to obtain vocabularies of more than twenty aboriginal languages, many of which had never been taken down before, and none so fully, as by me. These valuable testimonials of the now fast disappearing red race who preceded us in the possession of our country, I consider among the most important of my collections, and as such, I believe they will be esteemed by the learned. They each embrace two hundred words, and, with but two or three exceptions, were all taken down by myself, with great care, and according to one system.

My further ethnological collections embrace portraits of many of these tribes, both male and female, showing the characteristic features of each. Sketches were also taken which exhibit their manners and customs, their arts, husbandry, etc. It is my desire to prepare a report on the ethnology of the Indian tribes of the extensive region explored by the Boundary Commission, should the government feel sufficient interest in the subject to authorize it. Without the aid of government, I shall be compelled to limit myself to a brief memoir, embracing merely my philological collections.

From the time of the Commission's landing at Indianola, during the whole period of its continuance, every opportunity that offered, without interfering with the direct object had in charge, was improved for the purpose of making explorations, and forming collections in various departments of natural science.

In the department of Botany four gentlemen were employed in making collections. Dr. J. M. Bigelow, Surgeon of the Commission, and Mr. George Thurber, who was most of the time connected with the Quartermaster and Commissary Departments, in addition to their other duties, examined the botany of the region respectively passed over by them, and made very large collections of plants—the latter over a country extending from the Gulf of Mexico across the continent to the Pacific Ocean. Mr. Thurber, who accompanied me in most of my journeys, was indefatigable in his exertions to make thorough examinations and complete collections of every thing belonging to his department, notwithstanding the numerous obstacles he had to encounter. He, in addition, formed an extensive herbarium, embracing plants, etc., collected in the various States of the republic of Mexico visited by us. Two other botanists, Dr. C. C. Parry and Mr. Charles Wright, have also made large collections. The former was connected with the surveying parties under the immediate direction of Major Emory, and did not accompany me, so that I am unable to speak from personal knowledge of his labors; but from his well known reputation, as well as that of Mr. Wright, I doubt not they have accomplished much. It is to be hoped that the government will place a proper estimate on the labors of these several gentlemen; and I feel confidence in saying that when they are made known, they will reflect great credit upon them, and furnish important accessions to science.

In Zoology our collections are large, and embrace many new species. The collectors in this department were Mr. J. H. Clark, Mr. Arthur Schott, and Dr. Thomas H. Webb. As these collections are unfortunately scattered, one portion being in the Smithsonian Institution and another in Boston, I am unable to speak with precision of their extent. Of the first collection sent home by Mr. Clark in the spring of 1852, the naturalists connected with the Smithsonian Institution, Professors Baird and Girard, remark that, "It will be perfectly safe to say that one hundred undescribed species of North American vertebrate animals have been added to our fauna. The entire annals of zoological history scarcely present a parallel to this case." Since that time other collections have been received by the same institution. It is to be hoped that this large and valuable accession to the zoology of the North American continent may be properly appreciated by our government, and that the distinguished naturalists now engaged in describing the specimens, may be authorized to present them to the scientific world in such a style and form as their value and interest merit.

From the peculiar geological features of the country passed over, a valuable report on that subject might be expected; but I regret that, as Congress denied me an appropriation for the purpose, I was unable to secure the services of any geologist competent to make such investigations as were desirable. Several gentlemen who filled responsible places, particularly Dr. Webb, Secretary of the Joint Commission, contributed their services in collecting such mineralogical specimens as circumstances would allow. It was highly desirable to institute a continuous series of geological and mineralogical researches, and to form a cabinet illustrative of the structure and mineral resources of the region along the whole course of the survey; but both the scientific corps, and the number of soldiers at my disposal for the purpose of escort, were too small to admit of this being done. Nothwithstanding, however, every drawback, a large collection of minerals was made by Dr. Webb, including silver ores from New Mexico and Chihuahua, and other ores from various places along the line, which have reached home in safety. Among these mineralogical treasures is a fine specimen of bituminous coal. In connection with this subject I may add, that we visited and explored many of the mines in New Mexico, Sonora, Chihuahua, and California, of gold, silver, copper, and quicksilver, and obtained specimens of the ores; besides which much valuable information was collected in reference to the extent, value, and productions of these mines.

I should do injustice to our accomplished artist and draughtsman, Mr. Henry C. Pratt, who accompanied me in my journeys to and from California, did I not speak of his valuable services. Besides the portraits of the Indian tribes and illustrations of their manners and customs, Mr. Pratt has made a series of many hundred sketches, representing the peculiar character of the country extending from ocean to ocean along the boundary line, and in the States contiguous. Many of these sketches are panoramic views embracing wide districts of country, and convey to the mind a better idea of it than the most elaborate description. I have, therefore, very reluctantly been compelled to omit the most important of them from the present work, as it would detract too much from their merits to reduce them to the size of an octavo page.

There is another topic, one too, which possesses a deeper interest for the American people and the whole civilized world, than those to which I have alluded. This is the adaptation of the country explored by the Boundary Commission *for the purposes of a railway.* The descriptions of the country given in our daily marches will convey some idea of the advantages presented; but without the large sketches mentioned, barometrical profiles, and elaborate maps, I could not do justice to the subject. In the extensive journeys of the Commission through Texas to the shores of the Pacific, by the route south of the river Gila, I was enabled, with the assistance of the engineers intrusted with the survey of this portion of the line, to collect much valuable information on the topography of the country, for the purpose of enabling the public to judge whether or not it is practicable to construct a railway there. It is to be hoped that Congress will see fit to lay this information, obtained with so much toil and expense, in a suitable manner before the people.

The maps of the survey, as well as the astronomical, magnetic, and meteorological observations, with all that strictly appertains to the running and marking of the boundary line, were, by the instructions of the Secretary of the Interior, placed in charge of the surveyor, Brevet Major W. H. Emory, who alone is held responsible for the faithful performance of these duties. From the high character of that officer as an engineer, the public may expect, in proper season, a satisfactory account of his labors in these departments. Some time must elapse before the maps to illustrate the whole Boundary, from one ocean to the other, can be completed; I have therefore been compelled to construct meanwhile the map prefixed to this work from my own itinerary and from the most authentic information that could be obtained.

The question has been repeatedly asked, and may be asked again, why the account of the doings of the Commission embraced in this narrative was not published by the government, alike with other reports of explorations made by its officers. In reply I have to state that, on my return home, after being superseded as Commissioner, I was desirous to submit my report to the Secretary of the Interior, for publication under his direction. To effect this a resolution was offered in the Senate by one of its distinguished members, General Houston of Texas, who takes a lively interest in the promotion of science, and particularly in the investigation of the unexplored regions of our country, to authorize me to prepare and publish a full Report of the labors of the Commission while under my charge, including the Natural History, in which so much had been accomplished. The efforts of the learned Senator however were unsuccessful, and the resolution was laid on the table. This decision, a source of lively regret to me, I trust is not to be regarded as final; and I cherish the hope that Congress will yet decide to place the whole results of the Commission before the public in a suitable manner.

CONTENTS OF FIRST VOLUME

FIRST DIVISION.

NEW-YORK TO EL PASO, THROUGH TEXAS.

CHAPTER I.

NEW-YORK TO INDIANOLA.

PAGE

Treaty of Peace between the United States and Mexico—Hon. J. B. Weller appointed Commissioner to run the new Boundary Line between the two Republics—Determines the initial point on the Pacific and the centre of the mouth of the Gila—Col. J. C. Fremont's Appointment and Resignation—J. R. Bartlett appointed Commissioner—Fitting out and Organization of the Expedition—Embarcation of main body of Commission from New-York—Embarcation of Commissioner and others—Water-Spouts—Havana—New Orleans—Arrival at Indianola . . . 1

CHAPTER II.

INDIANOLA TO SAN ANTONIO.

Preparations for the Start—Breaking mules—La Salle and its early History—Prosperity of Indianola—Commencement of Survey—Route to Victoria—Shoeing mules—Encampment in grove—Military drilling—Flourishing condition of Victoria—Primitive legal proceedings—Difficulties of navigating Espiritu Santo Bay—Description of surrounding country—Mexican rancho—Observance of the Sabbath—Justice dispensed in the matter of a calf—Goliad, its early history and ruins—Massacre of prisoners after the battle of Perdida Creek—Leave Goliad—Murder of a Mexican by a teamster—Arrival at San Antonio—Another murder—Preparations for crossing the Plains—Description of San Antonio—Alamo—Mission Churches 10

CHAPTER III.

SAN ANTONIO TO FREDERICKSBURG.

PAGE

Advanced party formed for the journey to El Paso—Arms and equipments—Mode of travel—General order—Storm on the Prairie—Guadalupe river—Refinement among the German settlers on its banks—Terraced hills of Texas—Mormons in the valley of the Piedernales—Fredericksburg. 46

CHAPTER IV.

FREDERICKSBURG TO HORSE-HEAD CROSSING.

Projected route through the wilderness—Setting out—Uninviting appearance of the country—Precarious condition of German settlements on the Llano River—Leave the Emigrants' Road—Crossing of the San Saba—Community of prairie dogs—Kickapoo Creek—Hints to future travellers—The Mezquit—Visit of Lipan Chiefs—Indian dexterity in mule catching—Regain the Emigrant Road at Concho River—Horse wounded by a rattlesnake—Character of country and vegetation—Mustang roads—Scarcity of water—Prairie on fire—Deceptive maps—Castle Mountains—Stray cattle captured—Pecos River—Chapporal—"Indian sign." 61

CHAPTER V.

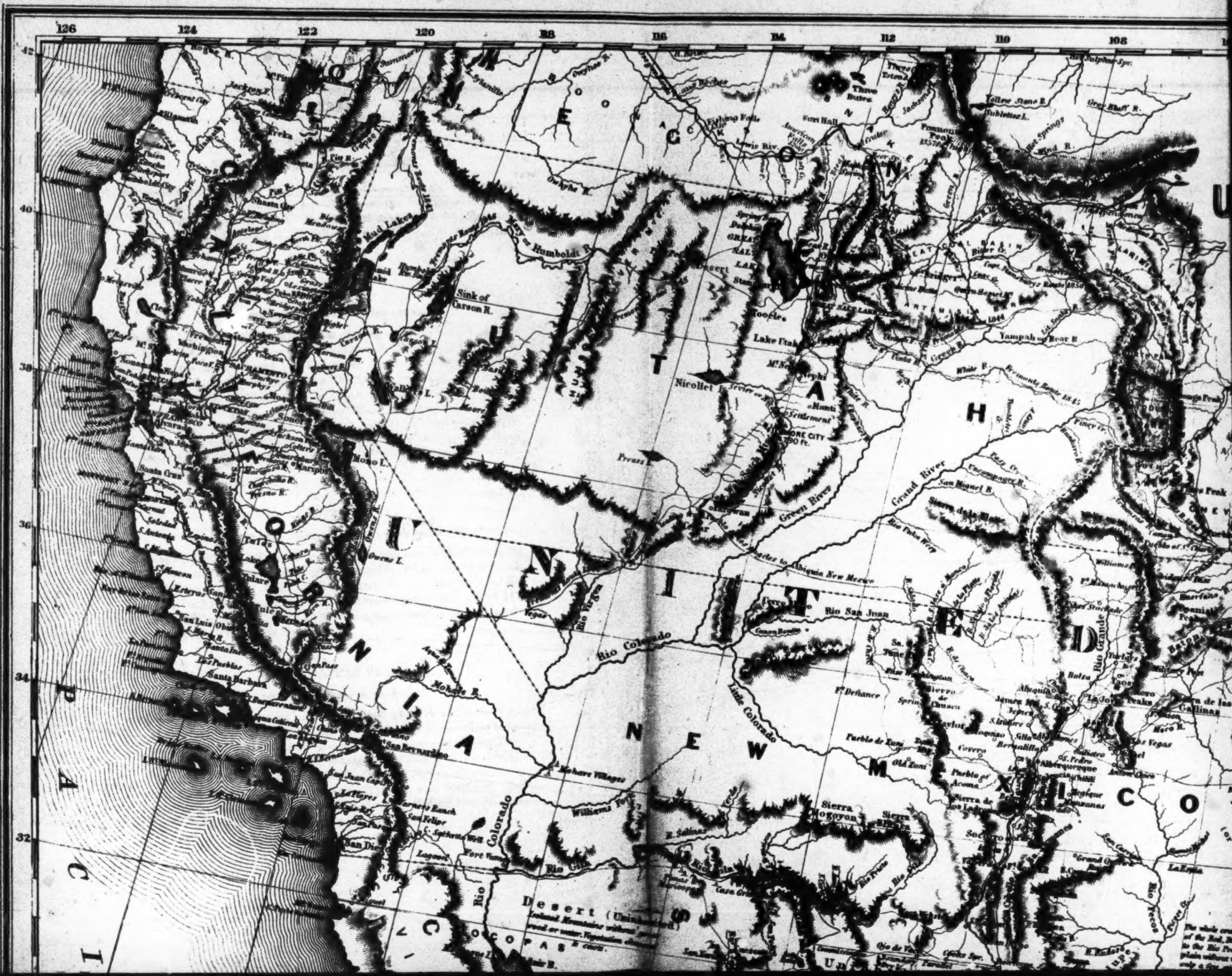
HORSE-HEAD CROSSING TO DELAWARE CREEK.

Crossing of the Pecos—Narrow escape from a cold bath—Desolate region—Prize oxen—Stray mule—Populous biscuit—Toyah Creek—Travellers' tokens—Rescue of lost mule—Dreariness and monotony of the Pecos—A horse's somerset—Delaware Creek—Snow-storm, sport, and Erman's Siberia—Mr. Thurber and others dispatched to El Paso—Letter to Major Van Horne. 96

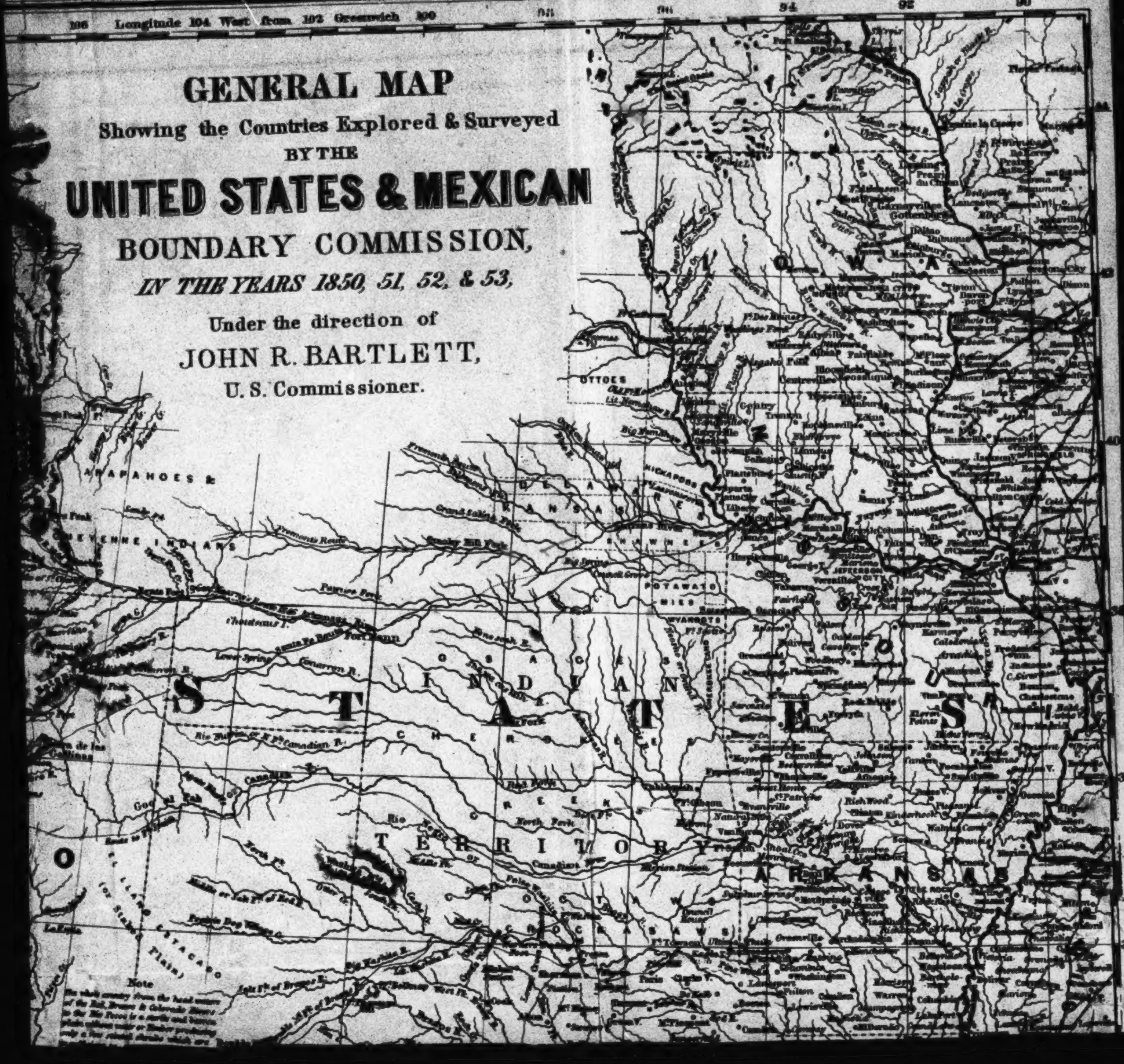
CHAPTER VI.

DELAWARE CREEK TO EL PASO.

Difficulty of proceeding—Set out with a small party in advance—View of Guadalupe Mountain—Boiling Spring—Deceptive clearness of the atmosphere—Guadalupe Pass—Descent to the plain—Meet Mr. Coon's train—Hospitality—Mr. Thurber's note—Take leave of the train—Cornudos del Alamo—Thorne's Well—Ojos del Alamo—Waco Mountain Pass—Waco Tanks—Meet Messrs. Thurber and Weems on their return—Arrival at El Paso—Itinerary of route—Remarks on the country traversed—Its adaptability to a public road. 115



126
124
122
120
118
116
114
112
110
108
42
40
38
36
34
32
OREGON
CALIFORNIA
UTAH
NEW MEXICO
UNITED
P A C I
Mud Lakes
Mary or Humboldt R.
Sink of Carson R.
Walker L.
Mono L.
Owens L.
Pyramid L.
GREAT SALT LAKE
Lake Utah
Nicollet R.
Sevier R.
Preuss L.
Fillmore
Fort Hall
Lewis Riv.
Fishing Falls
Three Buttes
Three Tetons
Fremont's Peak
Yellow Stone R.
Sublette L.
Green R.
Yampah or Bear R.
White R.
Grand River
Green River
Rio San Juan
Rio Colorado
Little Colorado
Rio Virgen
Rio Gila
Rio Grande
Rio Pecos
Mohave R.
Mohave Villages
Vegas
Sierra de la Plata
San Miguel R.
Uncompagre R.
Pueblo de Zuni
Old Zuni
Ft. Defiance
Albuquerque
Santa Fe
Socorro
Sierra Mogoyon
Desert (Uninhabited)
Desert
San Diego
San Bernardino
Santa Barbara
San Luis Obispo
Monterey
Santa Cruz
Sacramento
San Francisco
Stockton
Tulare L.
Klamath
Yreka
Rogue R.
Pit R.
Fort Yuma
Rio Colorado
COCOPAS
C O



GENERAL MAP

Showing the Countries Explored & Surveyed

BY THE

UNITED STATES & MEXICAN

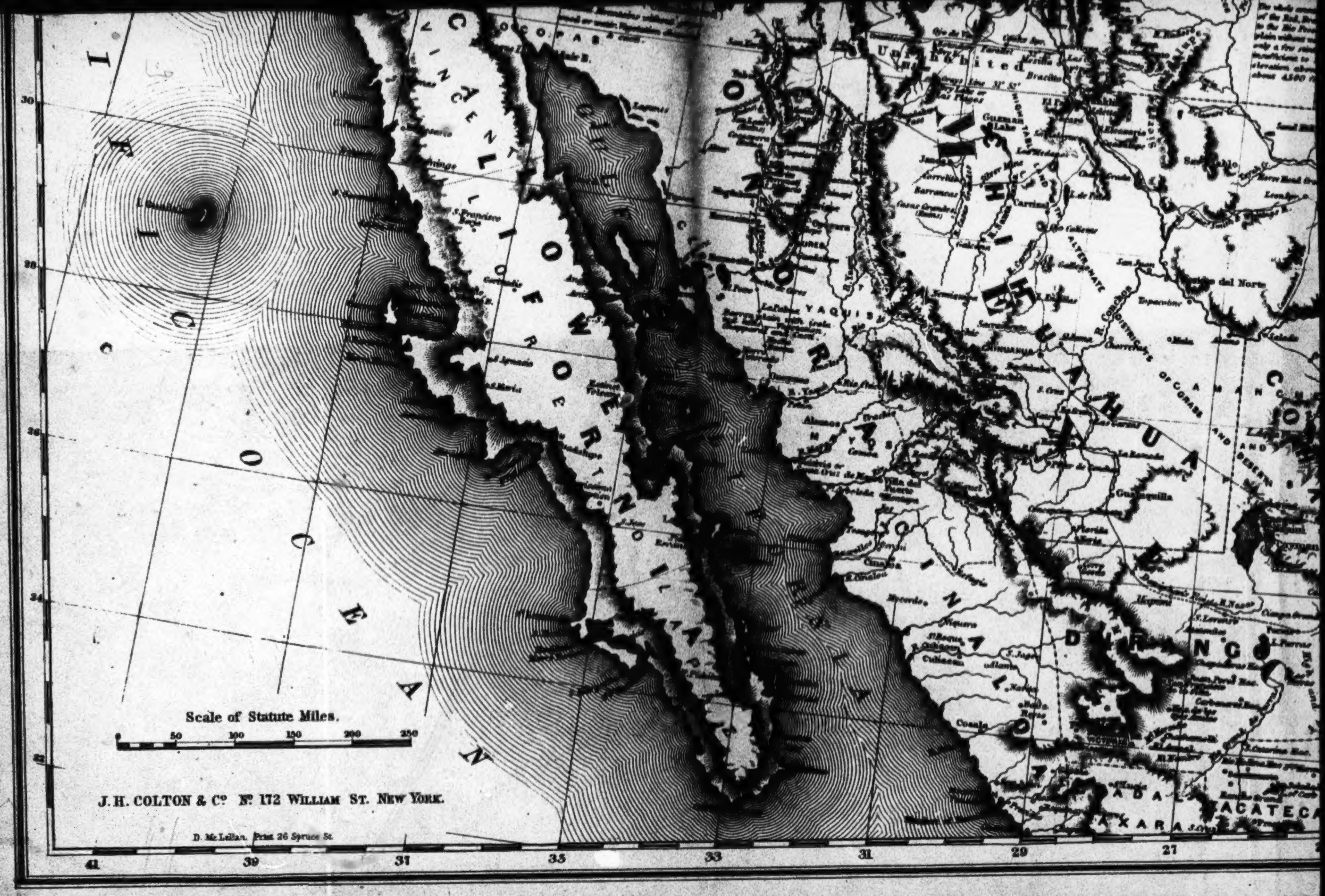
BOUNDARY COMMISSION,

IN THE YEARS 1850, 51, 52, & 53,

Under the direction of

JOHN R. BARTLETT,

U. S. Commissioner.


PACIFIC OCEAN
Scale of Statute Miles.
50
100
150
200
250
J.H. COLTON & Co. No. 172 WILLIAM ST. NEW YORK.
D. McLellan. Print 26 Spruce St.
LOWER CALIFORNIA
GULF OF CALIFORNIA
SONORA
CHIHUAHUA
SINALOA
DURANGO
YAQUIS
MAYOS
COCOPAS
Uninhabited
Rio del Norte
30
28
26
24
22
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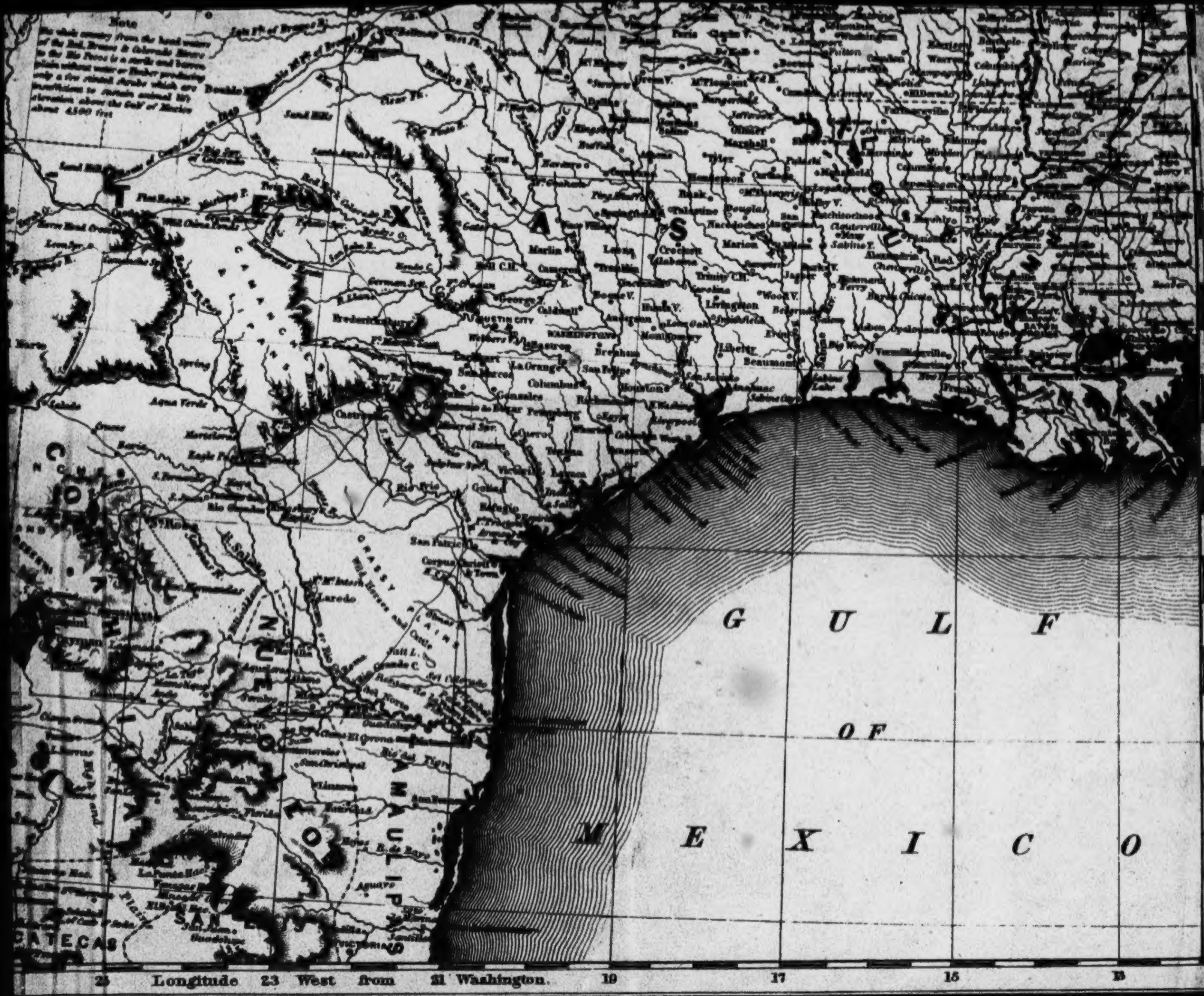
39
37
35
33
31
29
27


Note
The whole country from the head waters of the Red, Brazos & Colorado Rivers to the Rio Pecos is a sterile and barren Plain without water or timber producing only a few stinted shrubs which are insufficient to sustain animal life elevation above the Gulf of Mexico about 4500 feet
TEXAS
GULF OF MEXICO
Austin City
San Antonio
Houston
Galveston
Natchitoches
Nacogdoches
San Augustine
Crockett
Palestine
Marshall
Clarksville
Paris
Washington
Brenham
La Grange
San Felipe
Columbus
Bastrop
San Marcos
Gonzales
Victoria
Goliad
Refugio
San Patricio
Corpus Christi
Laredo
Matamoros
Monterey
Saltillo
Linares
Tampico
Alexandria
Opelousas
Beaumont
Liberty
Montgomery
Huntsville
Marlin
Cameron
Caldwell
Fredericksburg
Castroville
Eagle Pass
Sabine L.
GRASSY PLAINS
CHIHUAHUA
COAHUILA
NUEVO LEON
TAMAULIPAS
SAN LUIS
ZACATECAS
LOUISIANA
30
28
26
24
25
Longitude 23 West from 21 Washington
19
17
15
13

SECOND DIVISION.

EL PASO TO THE COPPER MINES.

CHAPTER VII.

EVENTS AT EL PASO.

PAGE

Losses of Animals—High price of provisions at El Paso—Excursion up the river—Entertainment given to the officers of the Commission by the civil authorities—The Bishop of Durango—Pueblo Indians—Meeting with General Condé, and commencement of the labors of the Joint Commission—Arrival and disposition of the main body of the United States Commission—Arrival of ox-train, and death of U. D. Wakeman—Departure of military escort for the Copper Mines—American desperadoes in New Mexico—Death of E. C. Clarke—Trial and execution of Wade, Craig, and Butler—Trial and execution of Young—Dinner and ball given under difficulties—Excursion to the Sierra Waco—Indian pictures at the Waco Tanks—Initial Point agreed upon, and Survey in its vicinity commenced—Depot established at the Copper Mines—Dr. Webb's report on the same. 143

CHAPTER VIII.

EL PASO AND VALLEY OF THE RIO GRANDE.

Early colonization of Mexico—Position of El Paso—Mode of irrigation—Agricultural productions—Vegetables—Fruits—Extensive culture of the grape—Wine—Brandy—The Rio Grande—Deficiency of water—Uncertainty of crops—Houses—How built—Oriental style preserved—Primitive mode of life—Flour mills—Degeneracy of people—Dress—Settlement on the American side—Coon's Ranch—Magoffinsville—Socorro—San Elesario—Mountain chains—Plants—Current and sinuosity of the Rio Grande. 183

CHAPTER IX.

EL PASO TO THE COPPER MINES.

Observations on the Rio Grande, from El Paso to Doña Ana—Establishment of the Initial Point, and ceremonies connected therewith—Description of Doña Ana—Mesilla—Route to Santa Barbara—Visit to ruins—

PAGE

Mirage—Route to the River Mimbres—Luxuriant vegetation on its banks—"Giant of the Mimbres"—Ojo Caliente—A broken arm—Arrival at the Copper Mines—Description and history of the Mines—Value of the timber in the vicinity—Abundance of game—Scarcity of vegetables—Visit to Sonora projected. 197

THIRD DIVISION.

JOURNEYS AND INCIDENTS IN SONORA.

CHAPTER X.

THE COPPER MINES TO AGUA PRIETA.

Spring at Pachetehu—Ojo de Vaca—Janos road—Col. Cooke's road—Scarcity of water—Dry bed of a lake—Mirage—Desert region—Zoology of the plains—Guadalupe Pass—Difficulties—Bears—Discover footprints of deserters from Copper Mines—Sycamore trees—Cañon—Luxuriant vegetation—Descend from the great plateau—Change of climate—Ruined hacienda of San Bernardino—Wild cattle—Black Water Creek—Teamster attacked by a bull—Grave of an American deserter. 241

CHAPTER XI.

AGUA PRIETA TO ARISPE.

Leave the California road—Agua Prieta—Send party to look for Fronteras—Mexican soldiers sent to guide us in—Journey resumed—Strike a rich valley—Break a wagon—Reach Fronteras—Description of the place—Abandoned by its people and recolonized—General Carrasco—Couriers between the frontier posts—Attack by General Carrasco on Apaches at Janos—Campaign against the Apaches—General Carrasco's opinion of American officers—The Doctor beset by the sick—Leave Fronteras—Coquiarachi—Valley of Barbari—Wild turkeys—Mountain Pass—Gold Mine—Bacuachi—Sonora River—Magnificent cañon—Chinapi—Curious sandstone formation—Arrival at Arispe. 261

CHAPTER XII.

FROM ARISPE BACK TO THE COPPER MINES.

PAGE

Description of Arispe—Primitive church service—Scarcity of grain and fruit, and abundance of vegetables—Set out on our return—Broken down wagon abandoned—Reach Fronteras—A blacksmith's independence—Celebration of a Saint's day—Manufacture of aguardiente—Various uses of the Maguay—Doctor's fees—Broken wagon metamorphosed into a cart—Sorry plight of a wild bull—Strike Cooke's road—Traces of fire in the Guadalupe Pass—Mexican encampment—Story of Americans attacked by Apaches—Reach the Copper Mines—Colonel Graham not arrived—Visit General Condé's camp, and consult with Lieutenant Whipple—Return to the Copper Mines. 282

CHAPTER XIII.

INCIDENTS AT THE COPPER MINES.

Visit from the Apaches—Mangus Colorado—Arrival of Mr. Sanford—11th Article of the Treaty relating to captives—Arrest of New Mexican traders—Inez Gonzales, the Mexican captive—Examination of traders—Story of the captive girl—Pinalenos Indians—General Condé arrives—The 11th Article of the Treaty enforced—Friendly intercourse with the Indians—Two Mexican boys taken from them—Excitement in consequence—Conference and dialogue with the Apache chiefs—Amicable settlement of difficulties. 300

CHAPTER XIV.

INCIDENTS AT THE COPPER MINES.

Intercourse with the Apaches—Mangus Colorado and his new clothes—Proper mode of treating Indians—Treachery and massacre of Indians by an Englishman—Tribe of Copper Mine Apaches—Their numbers—Extent of their incursions—Ethnological position—Inferiority of the tribe—Dress—Visit from the Navajoes—Their fine blankets—An Apache shot by a Mexican—Alarm—Arrest and examination of prisoner—Death of the Indian—The murderer demanded by the Apaches—Conference with the Chiefs, and their talk—Restoration of friendship. . . 319

CHAPTER XV.

INCIDENTS AT THE COPPER MINES.

Arrival of Mr. A. B. Gray—Meeting of Joint Commission—Objections of Mr. Gray to Initial Point—Mules missing—Arrival of Colonel Graham

PAGE

—Mules stolen from Frontera—Descent of the Apaches on the mule herd—Organization of parties for the Survey—Application to Colonel Sumner for more troops—Hostile attitude of the Indians—Second incursion of the Indians—Mules taken—Colonel Craig goes in pursuit—Arrival of Captain Buford with dragoons to our aid—Indians pursued by Colonel Craig and Captain Buford—Third incursion of the Indians—Volunteer party go in pursuit—Indians overtaken and cattle recovered—Apache chief recognised among the robbers—Determine to set out for the Gila. 340

CHAPTER XVI.

THE COPPER MINES TO RIO SAN PEDRO.

Organization of parties for the survey of the Gila—Leave the Copper Mines—Pack-mules—Mode of packing—Ojo de Vaca—Camp in the Burro Mountains—Ojo de Inez—Grizzly bear—Violent rain—Heavy travelling—La Piloncillo, or Sugar-loaf Mountain—Broad plain—Camp at El Sauce—Man missing—Camp in the Chiricahui Mountains—Boggy road—Want of water—Dry lake—Reach the Mexican camp—Meeting of the Joint Commission—Mr. Gray's objection to the boundary—March resumed—Mules abandoned—Reach San Pedro River—Its character. 355

CHAPTER XVII.

RIO SAN PEDRO TO SANTA CRUZ.

The valley of the San Pedro—Decide on going to Santa Cruz for provisions and mules—Departure of General Condé—Leave the San Pedro—Take the trail of the Mexicans—Deserted Indian village—Leave the trail—Wild horses—Santa Rita Mountain—Beautiful valley—Progress arrested—Critical situation—Mr. Thurber goes in search of Santa Cruz—Arrival of Colonel Graham—Ruined hacienda of Calabasa—Wild scenery—On short allowance—Return of Mr. Thurber—Retrace our steps towards the San Pedro—Mustangs—Camp on the Babocomori—Arrival of Mexican soldiers—General Condé loses his way—Sufferings of his party—Mexicans hunting cattle on the San Pedro—The father and friends of Inez Gonzales arrive—Set out again for Santa Cruz—Meeting of the captive girl and her mother—Arrival at Santa Cruz. . 379

CHAPTER XVIII.

SANTA CRUZ TO LA MAGDALENA.

Account of the missing parties—Description of Santa Cruz, and its population—Departure of Colonel Graham—Set out for La Magdalena—In-

PAGE

crease of party—San Lazaro—Cocospera—Its beautiful valley—The cañon where Inez Gonzales was taken—First sight of the Cereus Giganteus—Babasaqui—Wild cattle—Imuris—Terrenati—San Ignacio and its church—Abundance of pomegranates—Passports demanded—Proceed to Magdalena—Summoned before the Alcalde—Legend of the origin of the town—Festival of San Francisco—Religious devotees—Offerings to the Saint—Consecration of ribbons—Booths—Gambling—Perpetual fandango—Vegetable productions near the town—Fine scenery—Grand torchlight procession—Close of the festivities—Description of La Magdalena 406

CHAPTER XIX.

ILLNESS AND DETENTION AT URES.

Leave La Magdalena—Taken ill—Diary breaks off—Sufferings on the road—Reach Ures—Poor quarters—Dr. Webb and rest of party visit Guaymas—Kindness of Dr. Campbell—Description of Ures, the capital of Sonora—Theatricals—The Yaqui Indians—The Opate Indians—Visit from Tanori, an Opate chief—Other Indian tribes of Sonora—Exports—Narrative of an expedition against the Apaches—My party leave me and go to the Gila—Taken to Dr. Campbell's—Irruption of the Apaches—Imbecility of the Mexicans—Tanori and the Opate Indians go in pursuit—Visit from the Coco-Maricopa Indians of the Gila—Good news from Tanori—He defeats the Apaches and recovers the stock—Entrance of the victors with the recovered booty into Ures—Death of General Garcia Condé—His character—An American held in bondage—Arrival of General Flores—Departure for the coast 433

CHAPTER XX.

URES TO GUAYMAS.

Leave Ures—Rich valley—Tapahui—Don Manuel Gandera—His large estates—Successful farming—Statistics of his haciendas—Silver mine—Reach Hermosillo—Governor Aguilar—The Ceris Indians—Obtain their language—Account of the tribe—Mode of poisoning their weapons—Description of Hermosillo—The Sonora River—Productions of the valley—Business relations—Sketch of the town—Departure—Meet French emigrants—Description of the country—Its barrenness—Business-like mode of milking cows—La Cieneguita—Buena Noche—Reach Guaymas—Mr. Robinson, the U. S. Consul—Description of Guaymas and its Campo Santo—Its harbor—Commerce—Intense heat—Departure 458

CHAPTER XXI.

GUAYMAS TO SAN DIEGO, CALIFORNIA.

PAGE
Voyage down the Gulf of California in a pilot boat—Barren coast—Island of Carmen—Loreto—Reach Mazatlan—Its picturesque appearance—Description of the town—Americans here—Embark for Acapulco—Land at San Blas—Visit to Mr. Horn, the Captain of the Port—Ride to the old town—Its beautiful position—Ruined condition—Visit an old fortress—Leave San Blas—Description of the coast—Volcanoes of Colima—Land at Manzanillo Bay—Its unhealthy climate—Laguna—Cargo discharged—Stupidity of Custom House official—Leave without papers—Reach Acapulco—Chinese hotel—Beautiful harbor—Castle of San Carlos—Unhealthiness of the place—Extreme heat—Noxious insects—Description of the town—Ancient commerce—Departure for San Diego—Crowded state of the steamer—Voyage up the coast—Arrival at San Diego—Rejoin the Boundary Commission. 482

ILLUSTRATIONS TO FIRST VOLUME.

WOOD-CUTS.

No. Page

1. Mission of San José, Texas, ... 42
2. Mission of Concepcion, Texas, ... 44
3. Prairie-Dog Town, Texas, ... 70
4. Castle Mountain Pass, Texas, ... 91
5. Crossing the Pecos, Texas, ... 98 = v. 2 p 98
6. Guadalupe Mountain and Pass, Texas, ... 118
7. Waco Mountain and Pass, Texas, ... 132
8. Indian Paintings on Rocks, Waco Mountains, Texas, . 171
9. " " " " " . . 172
10. " " " " " 173
11. Church and Plaza, El Paso, Chihuahua, ... 189
12. Presidio of San Eleazario, Texas, ... 194
13. Approach to Mule Spring and Picacho of the Mimbres, New Mexico, ... 219
14. Sandstone Rocks, Valley of the Mimbres, New Mexico, 224
15. Valley of the Copper Mines (Fort Webster), New Mexico, . 227
16. Cañon Leading to the Copper Mines, New Mexico, . 232
17. Presidio at the Copper Mines, New Mexico, . . . 235
18. Defile in the Guadalupe Pass. Sierra Madre, Sonora, 254. = v. 2 p 254.
19. Town of Fronteras, Sonora, ... 265
20. Sandstone Columns, near Arispe, Sonora, ... 280

No. PAGE
21. TOWN OF ARISPE, SONORA, ... 281
22. GROUP OF APACHES, ... 326
23. APACHE HEAD-DRESS AND BOOTS, ... 329
24. BURRO MOUNTAINS, NEW MEXICO, ... 364
25. SUGAR-LOAF MOUNTAIN, CHIHUAHUA, ... 366
26. ROCKY CAVERN, NEAR THE BOUNDARY, CHIHUAHUA, . . 368
27. PUNTA DE SAUZ CIENEGA, SONORA, ... 370
28. CHIRICAHUI MOUNTAINS, SONORA, ... 369
29. WIGWAM OF THE PAPAGO INDIANS, SONORA, ... 383
30. TOWN OF SANTA CRUZ, SONORA, ... 408
31. DOORWAY OF A CHURCH, SAN IGNACIO, SONORA, ... 419
32. TOWN OF SANTA MAGDALENA, SONORA, ... 430
33. DATE-TREE AND FIELD OF SUGAR-CANE, URES, SONORA, . 441
34. MANZANILLO BAY, PACIFIC COAST, ... 496

LITHOGRAPHS.

No.
1. SNOW-STORM ON DELAWARE CREEK, NEAR THE PECOS, TEXAS, 112
2. GUADALUPE PASS ON COOKE'S ROAD, SIERRA MADRE, SONORA, 296
3. VALLEY LEADING TO SANTA CRUZ, SONORA, ... 402
4. CITY OF HERMOSILLO, SONORA, ... 468
5. CITY OF MAZATLAN, PACIFIC COAST, ... 486
6. CITY OF ACAPULCO, PACIFIC COAST, ... 500

FIRST DIVISION.

NEW YORK TO EL PASO, THROUGH TEXAS.

CHAPTER I.

NEW YORK TO INDIANOLA.

Treaty of Peace between the United States and Mexico—Hon. J. B. Weller appointed Commissioner to run the new Boundary Line between the two Republics—Determines the initial point on the Pacific and the centre of the mouth of the Gila—Col. J. C. Fremont's Appointment and Resignation—J. R. Bartlett appointed Commissioner—Fitting out and Organization of the Expedition—Embarcation of main body of Commission from New York—Embarcation of Commissioner and others—Water-Spouts—Havana—New Orleans—Arrival at Indianola.

THE treaty of peace between the United States and the Mexican Republic, dated at Guadalupe Hidalgo, on the 2d February, 1848, requires that "the two governments shall each appoint a commissioner and surveyor, who, before the expiration of one year from the date of the exchange of ratifications of this treaty, shall meet at the port of San Diego," and proceed to run and mark the boundary between the two countries "in its whole length to the mouth of the Rio Bravo del Norte." These officers are required to "keep journals and make out plans of their operations; and the result agreed upon by them shall be deemed a part of this treaty, and shall have the same force as if it were inserted therein. The two governments will amicably agree regarding what may be necessary to these persons, and also as to their respective escorts, should such be necessary."

The treaty requires that the starting or initial point on the Pacific Ocean shall be "one marine league due south of the southernmost point of the port of San Diego, according to the plan of said port, made in the year 1782 by Don Juan Pantoja, second sailing-master of the Spanish fleet, and published at Madrid in the year 1802, in the Atlas to the Voyage of the schooners Sutil and Mexicana." From this point the line separating Upper from Lower California was to be "a straight line to the middle of the Rio Gila, where it unites with the Colorado."

The Hon. John B. Weller was appointed the first Commissioner, and Andrew B. Gray, Esq., the first Surveyor under the treaty. They took with them to San Diego a corps of engineers and assistants. Major W. H. Emory, Captain E. L. F. Hardcastle, and Lieutenant A. W. Whipple, of the U. S. Topographical Engineers, the first as chief, and the latter as assistant astronomers, were detailed by the government to aid the commissioner and surveyor, in carrying out the stipulations of the treaty. They assembled at San Diego in the month of June, and entered upon their duties soon after.

Without going into any detail of the proceedings of this Commission, it will be sufficient for my purpose to say, that the two important points referred to, viz., the initial point, one marine league south of the Bay of San Diego, and the middle of the Rio Gila, where it unites with the Colorado, were determined by means of an elaborate series of astronomical observations, by the Topographical Engineers intrusted with these duties. A considerable portion of the straight line connecting these points was also run.

In February, 1850, it was found impracticable to advance eastward beyond the mouth of the Gila, and towards the frontier of New Mexico, in consequence of the difficulties attending the fitting out of large parties for the important service to be performed. The Commission then adjourned, to meet at El Paso, in the State of Chihuahua, on the first Monday of November following.

Soon after the adjournment, Mr. Weller was removed, and Colonel J. C. Fremont appointed to his place; but before the latter gentleman entered upon his duties as Commissioner, he was elected by the people of California, to represent that State in the Senate of the United States. Elected to so distinguished an office, Colonel Fremont did not hesitate to resign his place as Commissioner on the Boundary, when I was honored by President Taylor with the appointment to succeed him.

I received my letter of appointment in June, 1850, when I immediately set to work, to organize such a party as would be necessary to carry on the survey, and to procure the outfit required for the service. Here was a preparatory labor of several months. But, as I was required to be at El Paso del Norte, on the Rio Grande, on the 1st Monday in November, the day on which the joint Commission was to meet, agreeably to the adjournment in the preceding February, there was little time left me for these preparations; for, making every exertion, I could not expect to reach that far-distant place, in less than two months after leaving the Gulf of Mexico. This would leave me little more than two months, viz., July and August, to select my assistants, organize the Commission, procure the necessary outfit, and transport the whole to the most convenient point on the Gulf of Mexico, from which the party could start on its long march for the interior.

I immediately set to work to complete the arrangements previously made for wagons, tents, camp equipage, arms and ammunition, instruments, stationery, etc., and to purchase provisions, medical stores, and such other articles as would be required in a distant country, where few of the necessaries of life could be procured, and still less of the supplies required by surveying parties, except only animals, and the means of transportation.

Twenty-five wagons were contracted for, in Newark, New Jersey, including ambulances, or spring wagons, for the transportation of surveying and astronomical instruments, and other purposes. Four iron boats, with their equipments, were constructed, under the direction of Lieutenant J. G. Strain, U. S. Navy. Tents for the whole party, camp equipage, harness, saddles and bridles, pack saddles, mechanics' tools, fire arms, and the other articles named, were purchased in New York; in which duty I had the assistance of the same officer, who was indefatigable in his exertions to prepare the party for service.

That no time might be lost in the preparations for the field, I first appointed a Quarter-master and a Commissary, who immediately entered upon their respective duties. The former, James Myer, Esq., a gentleman from Texas, who had been connected with the Quarter-master's department, under General Taylor, in the late war with Mexico, proceeded at once to Texas, with his assistant, Edward Clarke, Esq., for the purpose of procuring horses and mules, which were to be brought together at our place of landing. I next appointed the various engineers, surveyors, and their assistants, mechanics, laborers, cooks, servants, etc.; and issued an order to all, to report themselves in the City of New York, on board the Steamer Galveston, on the 3d day of August, 1850, having chartered that vessel to transport the Commission and its stores to Indianola, in Texas.

In organizing the Boundary Commission, I had in view other objects, not directly connected with the survey. By the sixth article of the treaty of Guadalupe Hidalgo, provision is made for the collection of information relative to the construction of a "road, canal, or railway, which shall, in whole or in part, run upon the river Gila, or upon its right or left bank, within the space of a marine league from either margin of the river."

To make these examinations required an additional force; but besides this, my intention was to commence the survey with two parties simultaneously, at El Paso, and work towards both the Pacific and the Atlantic, by which means the work would be brought to a much speedier termination, than if a single party of engineers should take the field and carry on the work, from one end of the line to the other. To do all this required four full parties, two of them being astronomical and two surveying. The Commission was therefore organized accordingly. Its chief officers, when the re-organization took place, after my appointment, were as follows:

JOHN R. BARTLETT,	*Commissioner.*
ANDREW B. GRAY,	*Surveyor.*
COL. JOHN MCCLELLAN,	*Chief Astronomer.*
LIEUT. J. G. STRAIN,	*U. S. Navy.*
LIEUT. A. W. WHIPPLE,	*Assistant Astronomer.*
CAPT. E. L. F. HARDCASTLE,	*do. do.*

The latter officer remained in California, to finish the demarcation of the line between the mouth of the Rio Gila and the Pacific, and did not join the parties which accompanied me. For the programme of the Commission, as organized in Washington, in July, 1850, see Appendix C.

On the third of August following; or about six weeks after my appointment, the outfit, subsistence, etc., were so far ready, that the whole Commission, excepting Lieutenant Whipple, Colonel Chandler, one of the first assistant engineers, two of the assistants, and myself, embarked on board the steamer Galveston, at New York, and set sail the same afternoon for New Orleans and Indianola, Texas. The whole party, embracing officers and men, which embarked, numbered one hundred and five persons, taking with them provisions for six months. An escort of United States soldiers, under Colonel Craig, consisting of 3d Infantry, and embracing eighty-five men, accompanied the Commission.

On the 13th of August, having closed up all the business of the Commission, and procured some astronomical instruments which could not be got ready sooner, I embarked on board the steamship Georgia, Captain Porter, accompanied by the gentlemen before referred to, for Havana, where we arrived on the morning of the 19th, after a pleasant voyage. With the exception of a thunderstorm off Cape Hatteras, and the unusual sight of five water-spouts at the same time, from a large heavy cloud about two miles to the leeward, there were no incidents worth recording. The water-spouts were interesting on account of the unusual number seen at the same time. One of these, and the largest, rose in a direct perpendicular column from the surface of the ocean to the cloud, funnel-shaped at either end, or like a huge column, its base on the ocean, its capital under the cloud. All the others were spiral, and connected in the middle by an apparently small column of water. They soon disappeared, as well as the heavy cloud with which they were connected. The turbulent ocean, which had lashed the ship's sides for a couple of hours, soon became composed, and relapsed into a dead calm. This continued until we rounded the Moro Castle, and entered the beautiful harbor of Havana.

In the afternoon of the same day we left the Georgia, which went no further, and embarked on board the steamer Falcon for New Orleans. A striking contrast was presented in these two ships. The former was sweet and clean in every part; while the filth of the latter, and the stench arising from her cabin and hold, resembled that from a hog stye. She had just arrived from Chagres with a large number of passengers from California, many of whom were suffering with fever. One poor creature died during the day, and was sent on shore for interment. Although we felt somewhat apprehensive on finding ourselves in Havana at mid-summer, when foreigners generally leave, and when all avoid it who can, I suffered no inconvenience from the heat, which was not more oppressive than in New York; still we took the precaution to keep very quiet. A gentle breeze drew in from the ocean, making it comfortable under the awning. Towards evening, I went on shore with Lieut. Whipple, when we took a *volante* and drove out to the bishop's palace, and the neighboring public places of resort.

Tuesday, August 20th. At two o'clock P. M., sailed for New Orleans; the weather pleasant, and not uncomfortably warm. The boat was not only crowded with passengers, but, to increase the discomfort, her decks were filled with crates of pine-apples and other fruits, so as to leave but little room to move about. When I went to retire, I learned that there were two passengers on board with the yellow fever; in fact, I had arranged my cot near them before I found out what their illness was. Several of the passengers then, myself among the number, thought it more prudent to spread our beds upon the deck, where we had the advantage of a pure atmosphere. Reached New Orleans at midnight on the 23d, and proceeded at once to the Saint Charles Hotel, as did nearly all the rest of the passengers.

I here learned that the Galveston had arrived in safety, and, after a delay of a couple of days, had proceeded to Indianola. One of the officers had been taken with a fever, and remained behind; all the others were in good health.

After remaining at New Orleans two days, we embarked on board the steamer Portland, for Indianola, a clean and comfortable vessel, though somewhat slow. The surface of the gulf was scarcely ruffled by the breeze; so that no one was sea-sick, and all seemed to enjoy the voyage. The fourth day brought us to Galveston, where I found three young men belonging to the Commission, who had been left by the Galveston steamer. Remained here long enough to go to the beach and bathe, which greatly refreshed us; when we continued our voyage, and came to anchor the next evening off the town of La Salle, in Matagorda Bay. Several officers of the Commission, who had been watching the arrival of the steamer, came on board late at night, and informed me that all had arrived in safety, and that they were encamped at Indianola, about six miles distant.

August 31*st*. A small government steamer came off to us early this morning and took us to Indianola, which we reached at eleven o'clock. Many of the party met me at the landing, when I took an ambulance and rode to the camp, on the shore of the bay, a short distance from the town.

CHAPTER II.

INDIANOLA TO SAN ANTONIO.

Preparations for the Start—Breaking mules—La Salle and its early History—Prosperity of Indianola—Commencement of Survey—Route to Victoria—Shoeing mules—Encampment in grove—Military drilling—Flourishing condition of Victoria—Primitive legal proceedings—Difficulties of navigating Espiritu Santo Bay—Description of surrounding country—Mexican ranch—Observance of the Sabbath—Justice dispensed in the matter of a calf—Goliad, its early history and ruins—Massacre of prisoners after the battle of Perdida Creek—Leave Goliad—Murder of a Mexican by a teamster—Arrival at San Antonio—Another murder—Preparations for crossing the Plains—Description of San Antonio—Alamo—Mission Churches.

SINCE the arrival of the Commission, all parties had been busily occupied in getting ready to move into the interior; and those only who have had experience in fitting out a large train of wagons for a journey across the prairies, or to California, can form an adequate idea of the preparations required. If the route were a settled one, or if settlements were to be met with, even at distances of a hundred miles apart, where supplies could be procured and repairs made, much of the labor necessary on setting out, and a vast deal that is required on the way, might be dispensed with. At this place it was not necessary to complete our arrangements for a final start. The town did not furnish the facilities for so doing. My intention, therefore, was to proceed to San Antonio, the principal city of Texas, a hundred and forty miles distant, and there complete our outfit for the longer march across the prairies and deserts to El Paso del Norte.

Quarter-master Myer had arrived before the Galveston, with about one hundred horses and mules; but these were quite inadequate for the wants of the party. It was found, too, that the twenty-five wagons brought out were insufficient to transport the property of the Commission; in fact, they would little more than carry the instruments, personal baggage, tents, and camp equipage. The instruments were packed with great care, and filled four of the ambulances. It therefore became necessary to procure at once additional wagons, mules, and horses for the transportation of the provisions, of which we had a six months' supply for one hundred men, as well as for the men to ride on. But that no time should be lost, it was thought best, as fast as the wagons could be got ready, to proceed into the interior, as far as the town of Victoria, where water, wood, and grass were abundant, and where greater facilities were to be found for shoeing our animals than at Indianola. Here there was no wood, and water could be had only from one or two wells, and that of so bad a quality that many of the party had been attacked with complaints of the bowels.

The quartermaster and his men occupied themselves in breaking the mules, very few of which had ever been in harness before. This was done by making them draw logs about for a few days, when they became docile, and could be harnessed to the wagons with safety. While this was going on, the mechanics were employed in their various duties. The blacksmiths and carpenters in making many small fixtures to the wagons; amongst other things, all had to be provided with feed-troughs, not a single one of these necessary appendages being furnished with them. All the harness and collars had to be reduced, to adapt them to our Mexican mules, which were much smaller than the mules of Kentucky and Missouri, used at the north, and for the transportation of merchandise for the Santa Fé and New Mexican trade.

La Salle, the place opposite which we came to anchor in entering Matagorda Bay, is so named in memory of one of the most remarkable of the early explorers of the North American continent. This distinguished Frenchman, with the ardent zeal which characterized his countrymen in their attempts to penetrate to the very heart of the continent, had passed the great chain of the northern lakes, pushed his discoveries to the head waters of the Mississippi, and traced its course to the gulf, before the first English colonist had established himself on the Atlantic coast. Coasting along the shores of the gulf in search of a spot whereon he might establish a colony, he landed, against his will, at or near the spot which now bears his name, where he remained nearly a year with a little band of adventurers, facing all the dangers and undergoing all the hardships to which they could be exposed in a country surrounded by hostile Indians. In his attempt to extricate his party, he was murdered by one of them.

This place was selected as the most desirable spot for a town, on account of its depth of water, and convenience of approach from the gulf. Vessels drawing ten feet of water, are said to have passed in without difficulty; and, to use the words of an enthusiastic admirer of its position, who doubtless had some interest in its success, "it seems to have been intended by nature, to rear and sustain a large commercial city."

From the several examinations which have been made of Matagorda Bay, it appears that the harbors on its western shores, the chief of which are La Salle and Indianola, possess advantages above those of any ports on the Gulf of Mexico, between the mouth of the Mississippi and Vera Cruz, with the exception of Galveston. The whole Texan coast, it is well known, is bordered by long and shallow lagoons, connected with the waters of the gulf by narrow openings, whose position is constantly shifting, and which have not always sufficient depth of water for the passage of large vessels. Paso Cavallo, the entrance to Matagorda Bay, is only second to that which leads to Galveston Bay.

In the contest for superiority, Indianola seems to have carried away the palm; for while the highly applauded site for the city of La Salle is almost unoccupied, the former has grown into a large and thriving town, second only to Galveston among all the ports of Texas. Indianola is now the port for the extensive commerce with Western Texas, Chihuahua, and portions of New Mexico; a railroad has already been commenced to connect it with San Antonio, the chief city of the State, and two lines of steamers plying between it and New Orleans will continue to add to its prosperity. Should one of the contemplated railroads to the Pacific be extended west from San Antonio, with its terminus here, Indianola will rank second only to New Orleans among the cities of the gulf in commerce and population.

The necessity of giving early employment to the large corps of engineers attached to the Commission, in the duties which appertained to their profession, induced me, among other reasons, to make an examination of the country between Indianola and our place of destination on the Rio Grande, in order to ascertain the facilities it afforded for a railroad. With this view I caused a party to be organized to make a chain and compass survey, and to carry a line of levels to determine a profile of the route from this point to El Paso del Norte. The eyes of the South had long been directed this way; for whether there might be a more practicable route or not further north, it was a question of great importance to the southern section of the Union, that all the information possible, should be obtained with reference to the country we were about to traverse, and its practicability for the purpose of a railroad.

The various engineers, surveyors, and assistants, were desirous to enter on active duty as soon as possible, and received with great satisfaction the order to commence their labors in a field comparatively unknown.

Lieutenant A. W. Whipple, of the Topographical Engineers, was placed at the head of the party, and performed the astronomical duties; while Mr. John Bull was the principal surveyor, in charge of this department of the work. They selected their assistants, and entered upon their operations on the 3d of September.

The preparations on the train, the breaking in of the mules, and obtaining the additional transportation before alluded to, occupied about a week after my arrival. I left Indianola on the fifth of September for Victoria, distant about thirty miles, a portion of the train having preceded me. Immediately on leaving the shores of the bay we entered a fine level prairie, unlimited by hill or any elevation, and covered with the richest grass. Not a tree or shrub interrupted the broad expanse that lay before us. Here and there were gentle undulations, like the long waves of the ocean when, after a severe blow, its agitated waters are subsiding into a calm. The prairie fowl, the great curlew, and flocks of quail arose as we moved along; and being in advance of the party, I had an opportunity to test the qualities of my double-barrelled gun. When but a few miles from the town, we began to observe herds of deer a short distance from the road, grazing in quietness among the innumerable cattle which dotted the plain in every direction, doubtless imagining that proximity to their tame companions added to their security: though, in fact, it proved directly the reverse; for the cunning hunter would take advantage of their presence to approach the nearer to his game. The young men who accompanied me, being prepared with rifles, dashed off to try their hand at this exciting sport, in which they were more or less successful; so that on reaching our place of encampment, they were provided with a fine saddle of venison for their dinner.

The entire distance to Victoria is over the rich prairie just described. It is occasionally intersected by *bayous*, lagoons, or small streams, where the land is brought into cultivation, giving evidence of its inexhaustible richness in the luxuriant growth of cotton and sugar-cane which it bears. Near the water are clumps of trees; and such spots are eagerly sought after as places of residence.

On the morning of the 6th, I reached Victoria, where I found great activity in the camp. Here one of the most important jobs was to be performed, that of shoeing the mules. It was believed, that breaking them in to the harness at Indianola, and two days' journey with heavily loaded wagons, would render them more tractable, when the process of shoeing was to be undertaken. But this rough handling seemed to have subdued them but little. They were as wild and skittish as when roaming at large over the broad prairies, and as repugnant to civilized life, and the arduous labors attending it, as the untamed mustangs, which had never been brought under the control of the teamster's lash.

The first step in this process, was to construct a frame-work of timber, called the "stocks," consisting of four upright posts, connected by bars on all sides, and capable of containing a single mule. Near this was placed the blacksmith's forge.

The next step was to catch the mules, and place them in the stocks, a task of infinitely more labor than that of putting on the shoes. The mules were first driven into a *corral* or pen. The animal to be shod was then selected, and a lasso or rope thrown over his head, by which he was drawn from the inclosure. Then commenced a series of kickings, and rearings, and boltings, a caution to all to keep out of the way, when, by the aid of several men, the victim was brought up to the stocks. Now came the most difficult part of the operation, that of getting him in. A mule is by nature timid, even when he has been used for years, and subjected to kind treatment; but if, when only half tamed, he is violently brought under control, this timidity is increased to actual fright, and he does not hesitate to ply his heels pretty vigorously. There is no species of defence belonging to the horse, no stubbornness peculiar to the ass, but are concentrated in the mule. He possesses the bad qualities of his paternal and maternal progenitors, with the good traits of neither. The gentleness, docility, and instinct of the horse, are not found in the race; while the capricious obstinacy of his paternal ancestor is exhibited to the fullest extent. There is one trait of his character, however, that should be noticed, and that is his power of enduring fatigue and privation, which renders him better fitted for the long inland journeys, where there is an insufficiency of food and a scarcity of water, than the horse.

The sight of the stocks, as might be supposed, would not tend to make a mule more tractable. Then begins the tug. The rear kick, the side kick, the forward plunge, are exhibited to the fullest extent. Several men get hold of the halter, while other ropes are passed round his rear, and thus he is finally drawn into the stocks. Bandages or straps are placed under his body, by which he is raised from his feet. His head is secured between two wooden bars; and each foot, after a severe tussle, is fastened, by means of iron clamps, to the four upright posts or cross-bars. The victim is now ready for the shoeing process, which is the most expeditious part of the operation. The shoes having been previously brought to the size of the small hoofs, a blacksmith stands ready at each foot, with a shoe, nails, and hammer in hand. He does not then pause in order to make a close fit; but the shoe is put on in less time than a city farrier would spend in paring a horse's hoof. This part of the job being over, the finale of the operation is to haul the animal out, which, owing to the spirit of perverseness inherent in his nature, is generally attended with as much difficulty as that of getting him into the stocks. He is now suffered to go at large, unrestrained by the bars and rails of the corral. In this manner, about one hundred and fifty mules were shod; and, as only twelve at the most could be got through with in one day, about two weeks were necessarily spent in this portion of our fitting out for the march. Considerable time was also occupied in preparing the shoes, which were made in New York; and being adapted for the larger American mules, it was found necessary to reduce them all for the smaller and more delicately formed hoofs of our Mexican tormenta.

Believing it would be more advantageous to the members of the Commission whose presence was not necessary in the camp where the work alluded to was going on, and that it would be conducive to their health, I left Victoria on the 13th, with the larger portion of the Commission, and formed my camp in a beautiful grove of live oaks, on the banks of the river Colette, a tributary of the Guadalupe, six miles distant. We were here away from the vices and mischief which invariably attend large parties without employment, when encamped in or near a town. We here had fine running water, in which we could bathe, a practice which greatly tended to promote health. The trees afforded us a fine shade; and, as the heat was still great, the mercury rising from 95° to 100° Fahrenheit, in the coolest places, we found it more comfortable beneath the trees than to remain in our tents. There was excellent grass in abundance all around us, where our animals could feed, and we quietly awaited the arrival of the train, to continue our journey.

Before setting out from Indianola, it was deemed advisable, for the safety of the party, in the long and dangerous march of more than eight hundred miles through a country infested by hostile Indians, to organize the members of the Commission, not engaged on surveying or other duties, into two military companies. This would place them all under the more direct control of the officers, and hence lead to a better subordination. With this view, the engineers and their assistants were formed into a cavalry corps, under the command of Lieutenant J. G. Strain, U. S. Navy; and the mechanics and laborers into a rifle corps, under the command of Captain Edmund Barry, an officer who had served in the army during the Mexican war. All were provided with rifles or carbines, and many of the cavalry with Colt's revolvers, or six shooters. Lieutenant Strain, by means of careful drilling at Indianola, on the march, and during our stay at Victoria, brought his company into such a state of discipline, that it made a very respectable appearance. The saddles, bridles, and trappings, were the same as those of the U. S. Dragoons; the uniform, blue flannel shirts, dark pantaloons, and broad-brimmed white felt hats. The dress of the rifles was scarlet flannel shirts, the rest of the uniform the same as the cavalry.

The town of Victoria, which we have just left, is one of the most flourishing inland towns in Texas. It stands on the banks of the Guadalupe River, and, being in the midst of a fertile region, possesses a good trade. At the time of our visit, in September, 1850, it had three public houses, numerous stores, mechanics' shops of various kinds, a weekly newspaper, and a court-house. The latter edifice always brings with it, in new countries, numerous accessories. The court was in session at the time of our visit, and appearances indicated that a good deal of law and justice was dispensed here. The house, being of limited dimensions, could scarcely contain those whom business brought here, and the numerous idlers who have a propensity for hanging round country courts. Many were therefore obliged to spend their time in the shade of the fences and trees near by; and when required as witnesses, the constables came outside the building and called out their names to the full extent of their lungs; a primitive mode of doing business, though attended with much more comfort for the witnesses, than if obliged to be pent up in a closely confined room for hours and days together. How the juries were disposed of I did not learn; they could not, at any rate, carry them out into the high grass, as was customary in some of the new States of the West, when courts were first introduced.

Victoria is a place of recent growth, having been settled within ten years. The Guadalupe River, where it passes the town, is an insignificant stream; but its high banks bear witness that it is at times one of considerable magnitude. Attempts have been made to navigate it by means of a small steamer, but with indifferent success; and the difficulties attending the navigation of Espiritu Santo Bay, into which the river empties, will prove a serious obstacle to regular communication with the seaboard. I directed the quartermaster to transport the property of the Commission to Victoria by steamer from the coast; but finding it a very uncertain mode, and one which might be attended with serious delays, he thought it most prudent to make use of wagons, and such of our stores as exceeded our own means of conveyance were drawn with hired teams. As I did not pass through this place on my return, I do not know whether the attempt to navigate the Guadalupe with steamboats has been successful or not.

September 14*th*. The weather was extremely warm to-day, the mercury rising to 102° in the shade. Took an early breakfast, in order to examine the country around us before the sun was too high. The banks of the Colette are overhung with trees, from the branches of which hang long festoons of moss, waving gracefully with the breeze. The river is about 150 feet wide, and near our camp about five feet deep and quite sluggish. Saw many fine fish, among them the kind known as the "buffalo fish;" but it would not take the hook. The largest ones seemed fond of lying near the surface of the water, which enabled us to shoot them with a rifle. They proved excellent eating.

The vegetation presents more interesting features as we proceed inland,—the river bottoms are well wooded with oaks, pecan, and huck-berry,—and the minor plants are more numerous. The peach and fig flourish well in the gardens near Victoria; but the season is so dry, that we have no vegetables except pumpkins,—even potatoes have disappeared.

In our walk Mr. Thurber gathered many plants; we also found the first appearance of rock that we had seen in Texas, near the banks of the stream. Near by was a Mexican ranch, which was then an object of curiosity, being the first of the kind we had met with. It was built of sticks set upright, the interstices filled in with mud. The floor was of the same material. The house contained but a single apartment, which was occupied by a Mexican, his wife, and several children. The pigs were rooting near the door. Several fowls were perched upon projecting sticks, or nestling on the beds; and we had ocular proof that they sometimes deposited their eggs there. Bought out the entire stock of eggs, and all the milk that could be spared.

September 15th, Sunday. Thermometer at 101°. Announced that I would read the church service at 9 o'clock, and invited all to attend. It was a source of gratification to find that the whole camp were present save the two men on guard. The service took place beneath the branches of a large tree, where we were sufficiently protected from the sun's rays. The chapter read on this occasion was from the 20th Corinthians, giving the narrative of St. Paul's voyage and shipwreck, which seemed an appropriate one: a hymn was afterwards sung, in which the greater portion joined. This being over, all returned to their tents, or beneath the adjacent trees, and passed the remainder of the day in quietness. Much satisfaction was expressed at this observance of the Sabbath, and it was hoped that it might continue to be thus kept during our long march.

September 16*th.* The weather continues hot, the mercury reaching 99° to day, which of course kept us quietly in camp as before. Early in the day I set off with my gun in search of game, but was unsuccessful in finding any thing but a few quails: the prairie fowls which were so abundant on the great plain between Victoria and Indianola had disappeared.

A calf was killed and brought into camp by one of the men, who declared that he took it for a deer; and a few hours after several claimants appeared demanding pay for the animal. They did not come together, nor did either of them know that there were other applicants besides himself. The first, on my questioning him as to the color of the calf, said it was *black*. The next one said it was *red*, and a very valuable animal, more so indeed than a full-grown ox. A third declared it to be of some other color. I expressed my willingness to pay for the slaughtered innocent if I could know its rightful owner, and requested the several applicants to call on me again towards evening. In the mean time I sent for the skin, which was not found to correspond with the description given by either of the claimants, whom I then dismissed.

The wagons and mules continued to arrive at the camp; but when I was expecting soon to move, I learned that Colonel McClellan was seriously ill at his quarters in Victoria. So ill was he that many feared he would be unable to continue the journey. Dr. Bigelow, surgeon of the commission, remained to attend him.

While we lay here waiting for the remainder of the party, the wagons were overhauled, reloaded, and some additional teams added by purchase. Not being able to get all we wanted, a few were hired to aid in transporting the stores to San Antonio, where the quartermaster expected to complete his purchase of wagons and mules.

September 20th. Colonel McClellan having so far recovered as to join the camp, I gave orders to move to-morrow morning at daylight. Every thing, therefore, not absolutely necessary, was stored in the wagons, and preparations made for an early start.

September 21st. The bugle sounded at half past three o'clock; breakfast was dispatched before the sun had risen; and ere the morning mist, which, arising from the river, hung over our camp, had disappeared, we were on our way. The morning was cool and pleasant, and I was desirous to reach our proposed camping spot before noon. This was the first day's march of the whole party; and as the wagons were heavily laden, I did not think it best to press the animals too much at the start.

Our route was over a country of alternate prairie and woodland, with an excellent road. After a march of fifteen miles, the main body encamped at Manahuila:

while I with a small party rode on five miles further to Goliad, having some business to transact at that place, which I reached at 12 o'clock. Here I found Mr. F. Wheaton and Mr. Scott, assistants in the surveying party, who had been taken ill and were obliged to remain behind.

Towards evening Judge Lea, a gentleman of enterprise and a large landholder, called on me and invited me to his house at Old Goliad about two miles distant. He took a deep interest in the survey we were then making from Indianola to San Antonio, and had accompanied the surveying party when it passed through his lands a day or two before my arrival. Crossed the river in a log canoe, and reached the Judge's residence, a venerable and ruined church, just at sunset. Took a brief view of the ruins of the ancient town while the dim twilight remained.

The present town of Goliad is about two miles from the former town, and at the time of my visit contained about two hundred inhabitants. The old place, which is now in ruins, is situated upon a hill directly upon the west bank of the San Antonio River, at its highest navigable point, and formerly contained several thousand inhabitants. It was originally a Spanish Mission, instituted for the purpose of christianizing the Indians, and united within one inclosure a church and fort, while numerous dwellings were clustered under the protection of its guns. The date of its establishment is not known with certainty, the accounts varying from one to two hundred years. The church is the only building in any tolerable preservation, except two or three houses which have been restored, provided with new roofs, and made into very comfortable dwellings—better, indeed, than modern builders would think of erecting. The church seems to have been designed for the double purpose of a church and a castle. Its massive walls on every side, which measure four feet in thickness, are cemented with waterlime; and to its great strength is owing its fine state of preservation. Its extreme length is 90 feet, its breadth 27 feet. Its roof is a single stone arch from wall to wall, sustained by small buildings or cloisters which project from the sides, and which are connected with the main edifice; a parapet rises above the roof, behind which cannon were formerly planted.

In the various domestic wars of Mexico this was an important place, and frequently changed hands; nor was its importance lost during the struggle for Texan independence, when it was occupied by the Mexican as well as the Texan forces. Its original name was La Bahia del Espiritu Santo, the Bay Town of Espiritu Santo, because it was originally the place for collecting the revenue of the small ports upon the bay. Hence all persons arriving on the bay with merchandise were obliged to go forty miles into the interior to find the officer of the customs, to whom they had to pay their duties. Similar inconveniences exist at the present day in Mexico, on the Pacific coast: the collector of the port of Manzanillo, for instance, resides at the city of Colima, ninety miles in the interior. This name of La Bahia was changed by the Spaniards about thirty years since, when it began to decay as a religious establishment, to that of Goliad, on account of its great strength.

Around the church are some twenty or more ruined buildings of stone, with nothing but their walls standing. One of these extends about 150 feet southward, and appears, from its small apartments, to have been constructed for barracks: its walls, like those of the church, are very massive. A high wall seems once to have surrounded the church, but much of it now lies prostrate. The other buildings, which are detached and of various dimensions, were chiefly used as dwellings. The whole town is in ruins, and presents a scene of desolation, which to an American is at once novel and interesting. Each succeeding capture, of course, impaired the buildings; and after the decisive battle of San Jacinto, the Mexicans evacuated it and destroyed it as far as they were able. The material of these buildings is a soft white sandstone, which underlays the town, and which appears to become hardened when exposed to the air.

We enjoyed the hospitalities of Judge Lea, who is domiciliated in the old church, the interior being in good condition. To this gentleman we are indebted for many facilities for visiting the ruins, and for much information respecting the country adjacent. He had partitioned the church with a slight frame-work about ten feet high, which was covered with calico or brown cotton, the top being open; making it a very comfortable place for the greater portion of the year. After tea we ascended to the roof, to enjoy the cool breeze of the evening, and the beautiful landscape which there opens to the view. Situated on an eminence, the country can be seen for a great distance around. After the moon arose and cast a deep shadow from the ruined walls, and the long belt of fire from the burning prairie shed its red glare on the few clouds that flitted across it, the scene assumed an aspect of peculiar solemnity and interest. We lingered long to enjoy the fairy-like vision, and until the fatigues of the day warned us that it was time to retire.

The sword has truly given place to the ploughshare here; and the inclosure which has been the scene of many a bloody fight, is now employed by the Judge as an experimental garden, in which he has demonstrated the capacity of the soil and climate to produce any of the great Southern crops of cotton, corn, and sugar, as well as the choicest garden vegetables. The church is especially notorious as having been the place where Fannin and his men were confined and massacred. We were fortunate enough to meet with a gentleman, Judge H., who was one of the prisoners, and whose singular escape may be worth relating.

After the battle of Perdida Creek, between Fannin and 275 men on one side, and Urrea with 900 Mexicans on the other, articles of capitulation were signed, according to which, those who surrendered were to be treated as prisoners of war, and either released on parole or sent to some port upon the bay. The articles were drawn up within the Texan lines, and all was arranged in good faith. The prisoners were confined within the fortress of Goliad, where they met others of their countrymen, sufficient in number to make up four hundred. When Santa Anna was informed of their capture, he sent orders for them to be shot. The officers in command remonstrated, but the order was repeated peremptorily. The massacre took place upon the 27th March, 1836, eight days after the battle. The prisoners were marched out of the fort in three divisions, full of high expectations that the time of their release had arrived, and were shot down almost simultaneously by the Mexican soldiery. The gentleman above referred to was in the second division, and owes his escape to the most wonderful presence of mind. As his division was marching out, he heard the report of the muskets, which were fired upon the preceding division. Instantly the truth flashed upon his mind, and his course of action was decided. As he saw the lips of the Mexican officer move to give the order for the soldiers to fire, he fell upon his face as if dead. The soldiers stood within six feet of the prisoners, and fired with fixed bayonets. As soon as they had fired, they rushed upon the victims with their bayonets to complete the slaughter. Judge H. was pierced through the shoulder, bearing the wound without showing signs of life. After the execution, the scavengers and camp followers came to rob the dead. A Mexican, in cutting away his hunting shirt to get at his coat which was beneath, wounded him in the neck, at which he let escape some expression of pain; whereupon the Mexican, finding him still alive, beat him upon the head with the butt of his escopetto until he supposed life extinct, and then went on with his robbery. All this time the Judge retained a consciousness of his situation; and when all had left the bloody scene, he crawled, as well as his remaining strength would allow, to some concealment near the river, and at dark made his escape. After wandering three days without food, he obtained assistance from some kindhearted Mexicans, and finally reached the coast in safety.

As near as can be ascertained, about 375 Texans fell victims to this treachery. They are all buried in one common grave, with no other monument than the prison's ruined walls.

The situation of Old Goliad is well chosen, and from the top of the old church a view of surpassing beauty is obtained. The fertile valley of the San Antonio lies below; and all around the land stretches away in gentle undulations, not densely enough wooded to form a wilderness, but bearing here and there clumps of trees, disposed so regularly as to give the landscape a rural aspect. So closely do the clusters of live-oaks resemble orchards, and the recently burnt prairies, with the newly-springing grass, meadows, that one finds it difficult to convince himself that he is not passing through a highly cultivated district. Upon the opposite side of the river are the ruins of another mission—the Aranama—named from a tribe of Indians now extinct. This building, like the church before described, was surrounded with the ruins of lesser ones. It is of smaller dimensions than the one tenanted by Judge H.; but with restored walls, openings for windows, and a modern roof, it has been changed into a comfortable dwelling. It is occupied by a gentleman from New York, who lives in a style of elegance that we were quite unprepared to meet with in Western Texas.

Visited to-day the camp of Mr. Bull, a portion of whose party was near Goliad. They had made good progress with their survey; but, though they had met with no serious obstacles, had suffered much from the intense heat on the open prairies, where they could obtain no shelter from the mid-day sun. Joined the train, and moved on six or eight miles, to the banks of the Cabeza, a small stream, and encamped in a grove of trees near by.

September 22d, Sunday. Remained in camp. The grass being excellent, our animals had the advantage of good feed. Held service beneath a large tree, which was attended by the greater portion of the Commission.

September 23d. The cooks were called at three o'clock, and our breakfast dispatched by the break of day. This enabled us to move by five o'clock, and to reach our intended place of encampment, known as the *Ojo de Agua*, or Water Eye, before noon.

September 24th. Left at five o'clock, and after travelling over an excellent road, reached the Sebilla River, a rather diminutive stream to receive the appellation of river, and encamped upon its banks. Distance travelled, twenty-one miles.

September 25th. Took an early start, as usual. More timber appeared, and of a larger growth than we had observed towards the coast. The live-oak in particular, which had been of a stunted or dwarfish appearance, now assumed the stateliness of northern latitudes. Our ascent was more perceptible to-day than any day since our departure from the coast. Reached the San Antonio River at ten o'clock, and pitched our tents near a cluster of Mexican ranches. Distance travelled, seventeen miles.

A sad event occurred in camp this afternoon, which resulted in the death of one of our Mexican neighbors, who had been furnishing us with meat and other articles. While sitting in my tent in the afternoon, I heard the report of a pistol quite near, and immediately after saw a number of men and women running towards one of the ranches. I hastened to follow, and found a man lying on his back with the mark of a gun shot in his breast, which I was told had been inflicted by one of our teamsters named Green. The wounded man appeared to be about thirty years of age, and was surrounded by his father, mother, wife and four children. His brothers and sisters were also around him. Doctors Bigelow and Webb were in immediate attendance, and rendered all the aid possible. But as they pronounced the wound a mortal one, but little could be done for him, and he died in two hours.

The particulars of the murder were briefly these: While Green, the teamster, was gathering wood, he attempted to take some portion of a fence; when the deceased, who owned the farm and wood, ordered him off, at the same time drawing a jack-knife and pointing it towards him. Green dropped a portion of the wood, and returned to his fire with the remainder. He then took his pistol, a large revolver, and came back for the wood he had dropped. The man who had ordered him off was still there, and approached Green with his knife open. The latter, when within three feet of him, leisurely drew his pistol and discharged it at the Mexican's breast. The wounded man ran towards his ranche, but fell before he had reached the door.

I immediately caused Green to be arrested; though I found that during my visit to the ranch, he had been to my tent to confess the deed. He came forward at once, and related the facts as previously stated to me. My intention was now to keep a guard over the prisoner, and deliver him to the authorities on our arrival at San Antonio; for which purpose he was placed in a tent, with two men to guard him.

I stated to the family that the prisoner should be delivered to the authorities for trial, which in a measure pacified them. But for this, an attempt would doubtless have been made to take his life, word having been sent to the neighboring ranches of the occurrence. The man, I told them, was not a member of the Commission, but a Texan teamster, hired at Indianola. Afterwards, learning the poverty of the family, that the deceased was its main stay, and that the expense of the funeral would be great, I gave the father one hundred dollars.

During the evening, before the guards had been posted, and while our people were moving to and fro, the prisoner raised the back of the tent, unseen by the guard and others who were sitting near the entrance, crept to the outer lines of the camp, leaped on a horse which was staked near, and escaped under cover of the darkness. No more was heard of either horse or rider, though it was believed that some of the friends of the teamster had aided him in making his escape.

September 26*th.* Our march to-day brought us to the Cibolo (corrupted by the Texans into Sea-Willow) River, where we encamped.

September 27*th.* Took an early start, and reached the city of San Antonio at two o'clock, distant twenty-one miles. Having much to attend to in completing the outfit of the party, I took up my quarters at the Verandah Hotel, while the rest of the Commission encamped on the banks of the river, about four miles from the city. Colonel Craig, with the escort, had not been with us on the march from Indianola. As no protection was yet required, he proceeded, immediately on landing at that place, to his camp near San Antonio, where his train was preparing for him.

September 28*th.* Another sad event took place to-day. In making up the party for our journey to El Paso, it was necessary to procure teamsters in Texas, no men having been engaged at the north for such duty. When we started from Indianola, four or five persons who had been engaged for other duties undertook to drive teams. All the others had to be procured there or at Victoria; and the quartermaster was obliged to take such men as he could find, giving in all cases the preference to such as had been in the government employ, or who could bring good recommendation. But with all his care, several desperate characters were engaged. One of these, named Turner, had had a quarrel with Mr. Tennant, the butcher in the employ of the Commission, a very worthy man who had accompanied us from Washington. In the camp to-day they were seen having high words. Turner, it appears, had endeavored on several occasions to get the former into a fight without success. To-day Tennant was heard to say that he had no fears of Turner, if he would lay aside his knife and other weapons, and fight him fairly; at the same time drawing a small knife from its sheath and throwing it from him. No sooner was this done, than Turner drew his long bowie-knife and rushed upon him, plunging it into the side of Tennant, and causing his death in half an hour. The murderer sheathed his knife, and hastened to a horse which stood near. In another moment he was mounted, and, riding at full speed, he disappeared in the thick chapporal, or thorny bushes, near the camp.

This transaction took place in the very midst of the camp; but as broils and altercations were not uncommon among the teamsters, and as no one anticipated what was to follow, Tennant being a very athletic man, they did not interfere. In fact, from the statements made to me, the affair was so sudden that it scarcely admitted of any interference. But the blow of the murderer, and his subsequent escape, were witnessed by many. The whole camp was immediately in motion; horses were saddled, and several started in pursuit. The chapporal was high and thick; yet the pursuers, regardless of the difficulty and danger of riding through its thorny recesses, dashed on, and soon caught sight of the object of their pursuit. In a short time the two foremost of the party, Mr. Robert E. Matthews, and Mr. J. E. Weems, assistants in the engineer corps, succeeded in overtaking Turner, when, presenting their pistols, they compelled him to surrender. Having been disarmed, and others of the pursuers coming up, the prisoner was carried in safety to the camp. Great credit is due to Messrs. Matthews and Weems for their activity and courage in capturing this desperate man.

A detachment from the engineer corps brought their prisoner to me at San Antonio, and I immediately placed him in the hands of the sheriff of the county. Soon after, I saw him lodged in jail and handcuffed.

Although this affair did not attract much public attention, such things being of frequent occurrence at the time, yet, among the class to which the murderer belonged, there was much excitement, and threats were heard that an attempt might be made during the night to effect his release. The prison being an adobe building and quite insecure, I deemed it my duty to detail a guard of six men from the Commission to the jail for the night.

The following day an examination took place before the mayor, the Hon. J. M. Devine. Many witnesses were examined; and the result was the committal of the prisoner, to take his trial for murder. I learnt some months after that he was found guilty, and sentenced to fifteen years imprisonment. He remained in prison about two years; but on my return from the survey, I heard that he had made his escape.

Murders were common in Texas about the time of my visit in 1850; and it had been too often the case that the guilty escaped justice. At this time the laws were better executed; and now (1853) there is as much security for life and property as in the older States of the Union. Frontier States often contain a bad population, at least such is the case in their early history. At the time of the annexation of Texas, large numbers of vicious and worthless men, some of whom had committed crimes and eluded the hands of justice, had sought a home here, where law and order had not then been firmly established: life and property were little regarded by them. But since the laws have come to be more rigidly enforced, these desperadoes have found it necessary either to adopt more honest modes of living, or to take refuge on the very borders of Texas and New Mexico, where they can pursue their old courses with impunity, by crossing over when necessary into Mexico.

My servant who was taken ill on the march up, here died of fever: several others were attacked, but soon recovered.

As San Antonio was the last place at which supplies could be procured, and the train fitted out for the long march of nearly 700 miles, it was necessary to make it as complete as possible. We yet required a large number of mules and many wagons to transport the public stores, which had been sent forward in hired wagons. The quartermaster therefore found it necessary to increase the train to about 56 teams, which included sixteen Mexican carts, the latter drawn by three yoke of oxen each: some of the wagons, too, were of the largest description, and drawn by ten mules or five yoke of oxen. These, with some additional riding animals, and their equipments of saddles, bridles, etc., completed the means of transportation for the Commission and its stores.

We also procured here about a hundred head of beef cattle, to be driven with the train, and used on the march. The draught oxen I also intended to fatten after our arrival in the field of operations, for a future supply of beef; so that we were pretty well provided in this department of our subsistence. A few barrels of pork and some small stores were also added to our stock here: some additional arms, ammunition, tents, and camp equipage, finished our outfit.

From the lateness of the season there was an uncertainty about grass; furthermore, by the recent arrivals from El Paso, I learned that the prairies had been burned by the Indians a considerable portion of the way, and that it would be absolutely necessary to transport a considerable quantity of corn to keep the animals in good trim, and enable them to cross the desert portions of the route. The quartermaster, therefore, sent in advance to the military post on the Leona, 90 miles distant, several wagon-loads of corn, and made arrangements to carry as much in the train as possible, without overburdening it. In these various preparations, and the shoeing of the additional animals, about two weeks were spent. During this time the party remained encamped at the San Pedro Springs, about a mile and a half from the town. These springs, of which there are several, gush out of crevices in the limestone rock; and their united waters form a small river, which runs through the town, and unites with the San Antonio three or four miles below it.

The view of San Antonio from a distance, as it is approached by the Victoria road, is exceedingly beautiful. The place seems to be embowered in trees, above which the dome of the church swells with an air quite Oriental. But this pleasing impression is soon dissipated on entering the town, and making one's way among the filthy buildings of the Mexican suburbs to the plaza, or public square. The town is a strange mixture of massive old Spanish buildings and recent American structures. But upon the plaza the modern buildings have for the most part superseded the ancient; though some few remain, seeming lost and out of place in the company of their smart-looking neighbors. The old church still occupies its prominent position in the plaza. This is a building characterized rather by solidity than beauty, and has as much the appearance of a citadel as of a church. Indeed, during one of the battles of the war of Texan independence, it was occupied by the Mexican troops, and its tower still bears the scars made by the cannon balls of the besiegers.

San Antonio is delightfully situated. The rivers San Antonio and San Pedro run through the place. The latter is a small stream, and with us would hardly be dignified with the title of river. The San Antonio is much the larger of the two. It rises about three miles from the town, from a number of large springs, flowing, like those forming the San Pedro, from the solid rock. The largest of these is worth a visit. The water rises in a cavity some six or eight feet in diameter and twelve or fifteen feet deep, and rushes out in an immense volume. The water of these springs unite with Olmos Creek, forming a river, which, in its course towards the sea, receives the Medina, Salado, Cibolo, and other tributaries, and finally, uniting with the Guadalupe, empties into Espiritu Santo Bay. The San Antonio is capable of affording immense water power. At present, in its course through the town, it turns but one wheel, and that simply by the flow of the current.

San Antonio contains about 6000 inhabitants, of which number it is estimated two thirds are Mexicans, Germans, and French. Yet, notwithstanding this preponderance of other nations, the town is essentially American in its character. Mexican indolence cannot stand by the side of the energy and industry of the Americans and Europeans; and the new comers are rapidly elbowing the old settlers to one side. Some few of the Mexicans have the good sense to fall in with the spirit of progress; but the great majority draw back before it, and live upon the outskirts of the town in the primitive style of their forefathers.

Situated in the centre of a rich agricultural region, San Antonio is destined to be a place of much importance. The necessity of a railroad communication with the coast is severely felt, and energetic movements are making to establish it. At present the supplies of merchandise are brought from the coast by the slow medium of ox carts. These are driven by Mexicans, and in a favorable condition of the roads make the trip in six days. The business of freighting almost entirely supports the Mexican population of the city and its vicinity. The American people are too much imbued with the spirit of progress to engage in any business that partakes of the past. The idea of carrying on commerce with ox carts, and making 130 miles in six days, over an excellent road, might do for the past century, not for this steam and lightning age.

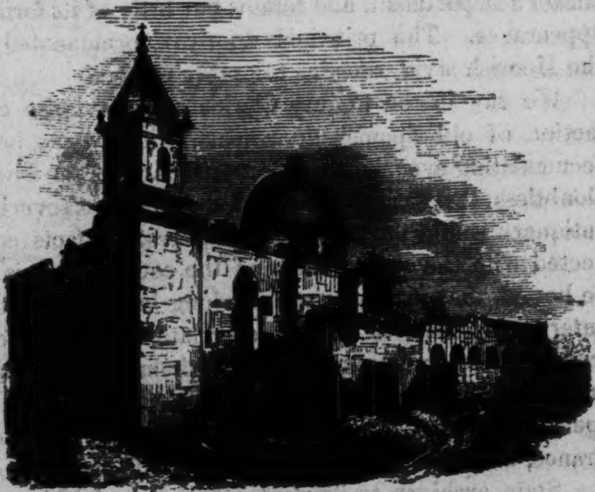
Large trains frequently leave here for El Paso, Eagle Pass, and other points on the Mexican frontier, and often penetrate to Chihuahua, Parras, and other Mexican cities. Those engaged in the Mexican trade are beginning to see the advantages the route through Texas possesses over the long one from Missouri, by way of Santa Fé; and doubtless ere long all merchandise for the northern part of Mexico will pass this way.

One of the principal objects of interest to the stranger in San Antonio is the Alamo, memorable for its brave defence by Travis, Crockett, Bowie, and others, who only gave up the contest with their lives. The building was originally a mission. It is now occupied as a storehouse by the United States Quartermaster's Department, and retains but little of its former appearance. The principal doorway, ornamented in the Moorish style, remains tolerably perfect.

We saw in the County Clerk's office a large collection of old Spanish documents, which have been accumulating ever since the first settlement of the town. Doubtless their careful perusal by some persevering antiquary would develope many interesting facts connected with the early history of the country. It is to be hoped, that measures will ere long be taken by the enterprising State to which they relate to rescue them from oblivion and decay, and cause them to be collated and given to the world. The Northern States have spent immense sums in sending agents to England, France, and Holland, to procure similar papers from the State archives to illustrate their Colonial history. Texas possesses in her own record offices voluminous documents of equal value, in which the scholar and historian of every State feels an interest second only to that of her own people.

Near the town and upon the banks of the San Antonio River are the remains of extensive mission establishments. We found time to pay a short visit to those of San José, San Juan, and Concepcion. There is another, La Espeda, which we did not visit.

A ride of about five miles through a mezquit country brought us to the mission of San José, situated upon the right bank of the river. This was the largest and wealthiest mission; and its buildings were constructed with greater display of art, and still remain in better preservation, than the others. Entering the inclosure formed by the granary and other out-buildings, we alighted in front of the main edifice or church. This is constructed of stone, and plastered. The principal doorway is surrounded by elaborate carving, which extends the whole length of the front, and includes numerous figures, among which San José, the patron of



Mission of San José, Texas.

the church, and the Virgin and Child are conspicuous. The material of this work has the appearance of stone; but we found on examination that it was a hard kind of stucco. The action of the weather has done much to destroy the figures; and the work of ruin has been assisted by the numerous military companies near here, who, finding in the hands and features of the statues convenient marks for rifle and pistol shots, did not fail to improve the opportunity for showing at the same time their skill in arms and their contempt for the Mexican belief. That portion of the front of the church not covered with carving, was ornamented with a sort of stencilling in colors, chiefly red and blue. But few traces of this have withstood the rain. The most perfect portion of the church is an oval window in the sacristy, which is surrounded with scrolls and wreath-work of exceeding grace and beauty.

The interior presents but little of interest. The dampness has destroyed the frescoes upon the walls, and the altar has been stripped of its decorations. It is now seldom used for religious purposes; as the Mexicans of the neighborhood are poor, and cannot often afford the fifty dollars charged by the San Antonio priests for officiating.

The convent in the rear of the church, as that portion of the building occupied by the fathers is called, remains in tolerable preservation, and is at present inhabited by an American who cultivates the adjoining lands. A fine view of the surrounding country may be had by ascending the tower, which is accomplished in part by means of a spiral staircase, and in part by a rude ladder, consisting of a stick of timber with notches cut in its sides. The plan of the building evidently included two towers; but only one of them was ever completed.

About two miles below San José, and upon the opposite side of the river, are the ruins of San Juan. This was never a building of much pretensions, and is in a more ruinous state than San José. The interior shows the remains of some exceedingly rude paintings; and we noticed that the earthen floor was broken up in several places where graves had recently been made.

It was late when we reached Concepcion, which is nearer the town than either of the other missions. The two towers and dome of the church make quite an imposing appearance when seen from a distance; but

Mission of Concepcion, Texas.

on approaching it, we found it not only desolated but desecrated; the church portion being used as an inclosure for cattle, the filth from which covered the floor to the depth of a foot or more. Myriads of bats flitted about, which chattered and screamed at our invasion of their territory; and we found nothing of interest within the church to repay us for encountering their disagreeable presence.

CHAPTER III.

SAN ANTONIO TO FREDERICKSBURG.

Advanced party formed for the journey to El Paso—Arms and equipments—Mode of travel—General order—Storm on the Prairie —Guadalupe river—Refinement among the German settlers on its banks—Terraced hills of Texas—Mormons in the valley of the Piedernales—Fredericksburg.

The long though necessary delay in getting the train ready to move, and the slowness with which it would probably proceed, convinced me that it would not be possible for it to reach El Paso on the first Monday of November, the 4th of the month, the day fixed upon for the meeting of the Joint Commission. After advising with General Brooke, Colonel Johnston, and others, as to the practicability and safety of my proceeding in advance with a small party, I came to the determination to do so, and announced my intention to the members of the Commission, requesting to be notified of such as would volunteer to accompany me. The whole would willingly have gone, although the proposed journey would be attended with severer duties and considerable danger, as we should not have the advantage of a military escort, which must remain with the main body of the Commission and its stores.

I selected the following gentlemen for the advance party.

Thomas H. Webb,	*Sec. to the Joint Commission.*
Robert C. Murphy,	*Asst. Secretary and Clerk.*
George Thurber,	*Botanist and Commissary.*
Theodore F. Moss,	*Geologist.*
John C. Cremony,	*Interpreter.*
Edward C. Clark,	*Quartermaster.*
Robert E. Matthews,	*Assistants in the Engineer and*
John B. Stewart,	" *Surveying Corps.*
Thomas Thompson,	" " "
S. P. Sandford,	" " "
J. Thomas McDuffie,	" " "
Thomas Dunn,	" " "
George G. Garner,	" " "
J. E. Weems, Jr.,	" " "
Clement Young,	" " "
C. Neville Simms,	" " "
George S. Peirce,	" " "
A. P. Wilbar,	" " "

R. B. Smith, *Mason;* G. W. Miller, *Blacksmith;* Wm. Garratt, *Harness-maker;* William Ferguson, *Carpenter;* Thomas Briggs, *Tailor.* These with *cooks, servants, hunters,* and *teamsters,* making altogether thirty persons, constituted the party.

The main body of the Commission, which did not leave until several days later, intended taking the Southern route, which had been more travelled and was better known than the Northern one, by the way of Fredericksburg. But with the advice of those who had lately come over the Northern route, I determined to take that. The distance was said to be about thirty miles less, and there was a prospect of finding better grass.

October 10*th*. Although orders had been given to have every thing in readiness to start early this morning, on going out to the camp on the San Pedro, I found the train was not ready. Being determined to move if I did not get a mile, and the wagons having at last been geared up, we took leave of our friends at 4 o'clock in the afternoon, and reached a pool of water four and half miles distant just before dark.

My train now consisted of six wagons, each drawn by five mules, and my carriage by four: the latter was what is called in New York a Rockaway. It was a large vehicle with close sides and windows, and so arranged that it could in a few minutes be turned into an excellent sleeping place; it was so occupied by me during the whole journey to El Paso. It might also with propriety be termed an armory, and did receive that appellation from the number of fire-arms contained in it. First, there was suspended at the top a double barrelled-gun; while to one of the uprights was affixed my rifle, one of Sharp's repeaters; a heavy revolver, one of Colt's six-shooters, was strapped to each door; and Dr. Webb (who rode with me) and I were both provided with a pair of Colt's five shooters. My carriage driver carried a pair of Deringer pistols. We were thus enabled, in case of necessity, to discharge a round of thirty-seven shots without reloading; besides which, Sharp's rifle could be fired at least six times in a minute. I also carried a spy-glass, barometer, lantern, and a variety of tools and other articles which we had constant occasion for on the road. The rest of the party were mounted on horses or mules, and I occasionally resorted to a mule by way of variety; for it is a dull mode of travelling to be dragged slowly along for eight or ten hours a day cramped up in a carriage. I also made it a point to walk a few miles every day on starting, which practice was followed by others.

Every man in my party was well armed, the officers with Colt's revolvers and a rifle; the mechanics, laborers, cooks, and servants, with rifles, and the teamsters with pistols or rifles.

We seldom moved at a faster gait than a walk; as I did not wish to run the risk of fatiguing the mules or breaking them down, while the feed was scanty, and there were no means of making good any losses of animals. By setting out at 7 o'clock, which was as early as we could get off on an average, we could make about twenty miles by two o'clock, which gave the animals time to graze before night, when it was necessary to bring them all in. An earlier start might have been made, but the animals had to be fed first; and when there was good grazing, they were turned out at daylight for the purpose.

On leaving camp, one half the horsemen took the lead as an escort; for the timid mules are always reluctant to lead off, and do much better when a horse is in advance. I followed with my carriage, when not mounted on my mule; the train of wagons came next, with a few horsemen alongside; and the cooks, servants, etc., brought up the rear.

On reaching a camping ground, we formed what is called on the prairies, and by all overland travellers, a *corral*, or inclosure, to serve as a protection for men and animals. When there is a good number of wagons in a train, a very large inclosure may be formed, sufficient to contain the tents and all the animals; but my small train of seven vehicles was too limited for that: the wagons were therefore arranged in a semicircle, and the tents pitched along the base. After the animals had been "*corralled*," a stout rope was drawn across in rear of the tents, to prevent their escaping should any get loose. When the ground would admit of a large *corral*, the animals were staked inside, but they were generally made fast by halters, or *lariats*, to the pole of the wagons for the night; and in this position, corn was fed to them when we had it. The following order was issued on leaving San Antonio:

"*General Order for the government of the Advance Party of the U. S. Mexican Boundary Commission, on its march from San Antonio to El Paso del Norte.*

"As this portion of the Commission is entering a country inhabited by warlike tribes of Indians, where no resources can be had beyond what the prairies supply, it is absolutely necessary that a rigid observance be kept of the following order:

"The same organization of the cavalry company formed at Indianola, will be continued to El Paso.

"Mr. Geo. S. Peirce, commanding the cavalry, will act as master of the camp, detailing for the guard whatever force may be deemed necessary for the safety of the train.

"Every member of the Commission, the teamsters and cooks excepted, is expected to do guard duty.

"The train and escort will keep as close together as possible; and after leaving Fredericksburg, no one will be permitted to leave the train beyond a short limit.

"Mr. Cremony will take charge of the ammunition, inspect the arms, and report in what manner every man is armed. Economy must be used in the ammunition, as the quantity in the train is limited.

"As there is one *jornada* of seventy miles without water, and we may suffer inconvenience elsewhere, every man who has not already provided himself with a canteen or gourd, will do so before leaving Fredericksburg.

"In case of any difficulty or accident to the wagons, it is expected that every one will lend all the aid in his power to remove it, and hasten the movement of the train.

"Mr. E. C. Clark, the acting quartermaster, will arrange the encampments and direct the distribution of the forage. It is absolutely necessary that there should be an equal distribution of corn, and no one will be permitted to take more than is assigned or delivered to him. On this depends the safety of our animals, and consequently our own. A limited quantity of corn can only be taken, and great economy must be used in its distribution.

"On coming into camp, holes must be dug for the fires, which must, when the ground permits, be placed in hollows, or beneath a hill, in order to conceal the encampment as much as possible.

JOHN R. BARTLETT,
Commissioner."

IN CAMP, NEAR SAN ANTONIO, October 11, 1853.

The weather on the first evening was so warm and pleasant, that the young men did not pitch their tents, but bivouacked for the night. One was afterwards set up for the botanist and geologist, who had some labor to perform. About midnight, one of those sudden storms arose, which are so common in this region: the rain fell in torrents, the wind blew with violence, the thunder re-echoed from the hills, and the vivid lightning showed our tentless party in a very sorry plight. A few sought shelter in the only tent that was pitched; but scarcely had they got ensconced within, when a stronger gust than usual drew the pins from their fastenings and laid the tent flat upon the ground. As there was no other shelter near, they had no alternative but to lie soaking in their wet blankets till morning. I feared that this rude exposure at the outset would be attended with unpleasant consequences; but all were up early and ready for the march in the morning.

October 11*th*. Deferred starting until 9 o'clock, in order to give the party time to dry their clothing. The road was exceedingly heavy in consequence of the rain, which kept falling at intervals during the morning. The country, since we left San Antonio, consists of low hills, with broad intervening valleys, and is covered with rich mezquit grass. Clusters of live oak abound in the valleys, while the hills are comparatively bare of trees. Left the road with my mule and ascended a high conical hill on the left, from which I had a fine view of the surrounding landscape. Limestone seems to prevail here, and much of it crops out of the ground on which the road passes, making it exceedingly rough for the wagons. A very little labor would make the road a good one; but most of the roads in Texas are so good naturally, that the idea of improving such portions as really need it, seems never to have been entertained. Reached a well known watering place called the Comanche Spring, over which a stone building has lately been erected. Several German families reside here, who have brought their lands into a fine state of cultivation.

October 12*th*. Morning quite foggy. The roads very heavy and stony, and the country of the same character as that passed over yesterday. Open grassy plains occur at intervals, with clumps of live-oak, giving a cheerful and picturesque appearance to the landscape. Passed the dry bed of a stream, in following which we spent an hour waiting for the train to come up. Mr. Thurber collected some specimens of plants, among them several species of Euphorbia. First noticed the Sycamore to-day. The prevailing timber continues to be live-oak. Reached Sabine Creek at 3 o'clock, P. M., where we encamped after a very hard day's march, our mules showing much fatigue. The margins of the creek bore cypress trees of large size, and great beauty of foliage. This is the last place at which we saw the palmetto. The bright flowers of the *Lobelia cardinalis* were abundant.

October 13*th*. An express from Quarter-master Myer arrived at midnight, informing me that in consequence of a further call upon him for horses for the party, and to meet other demands, he should require more funds. The messenger waited till after breakfast, when he was dispatched to the quarter-master with the requisite drafts.

Crossed Sabine Creek, and found both the descent and ascent very bad. The banks being high, we had to follow the bed of the stream over huge rocks, which I feared would disable our wagons. But by dint of pushing and lifting, and hitching horses ahead of the mules, we succeeded in getting across and on the opposite bank without accident. Bits of rolling prairie, covered with luxuriant grass, with here and there a clump of live-oaks, continued as before. Limestone frequently appears above the surface. On reaching the Guadalupe River,. we stopped at the log houses of a small German colony. Among these, I was not a little surprised to find one occupied by a gentleman of learning and taste, with a choice library of scientific books around him. In chemistry and mineralogy, his collection was particularly rich; and even in other departments of natural science, as well as in history, voyages, and travels, it would have been a very respectable one in our large cities, where books are easily procured. Some good pictures, including copies from Murillo, evinced his taste in the fine arts. There was no floor or glass windows to this humble dwelling, and as much daylight seemed to come through the openings in the logs as through the windows. A plank table, chairs covered with deer skin, and a rude platform, on which was spread a bed filled with corn husks, but destitute of bed-clothes, constituted the furniture. The walls were covered with books, except one spot, where were arranged twelve rifles and fowling pieces of various kinds, with other paraphernalia of a genuine sportsman; while here and there, jutting out from a projecting corner or log, were sundry antlers, evidence of the skill of the occupant. For want of closets and drawers, these antlers served to hang his clothes on.

On entering this primitive dwelling, we found its owner, Mr. Berne, busily engaged upon his meteorological table. He received us with kindness and suavity of manner; and we found him, as well as several others of his countrymen who had entered, communicative and intelligent. They had been here two years, and formed part of a large colony of Germans, who had settled in the vicinity. By invitation, we called at an adjoining house, equally primitive with that before described. On the rude walls hung some beautiful pictures, while other articles of taste, and a cabinet of minerals, had their appropriate places. Here, too, was a fine harpsichord, from which we were treated to selections from the most popular composers, played with an expression and feeling which indicated a master's hand. In the yard were some fine merino sheep; and while we were listening to the conversation of our friends, a tame peccari thrust his long nose against me to receive my caresses, much as a faithful dog would. But the propensities of the swinish family, to which the peccari is closely allied, were so strongly exhibited in this specimen, that I could only gratify his affection for me by rubbing his back with a stick, which seemed to afford him all the pleasure he desired. It is pleasant to meet such emigrants as these Germans, who bring with them the tastes of their father-land, and the means of further cultivating them. They bring cheerfulness and contentment with them, and impart to the pioneer population by which they are surrounded that love for refined enjoyments in which it is so often deficient.

Fording the Guadalupe River, which is here about eighty feet wide and beautifully transparent, we came to a more open country, though with patches more closely wooded than any yet observed. The prospect on every side was broad; the land appeared rich, and presented the traces of long cultivation. Passed several fenced inclosures, the first we had seen since leaving San Antonio.

A species of grape (probably *Vitis æstivalis*) was abundant in the bottoms of the rivers; and at the crossing of the Guadalupe we found the vines in great profusion, climbing into the tops of lofty trees, and filled with fruit, of which some of our young men gathered great quantities, and which proved very acceptable.

Stopped at the house of Dr. Ernst Kapp, Professor, as indicated by his card. There was here the appearance of comfort and taste, though the house was of logs. I was introduced to his wife and daughter, who both appeared to be intelligent, and several bright-looking children. Waited here a couple of hours for a supply of corn, and then drove to a watering place seven miles further, where we encamped for the night.

October 14*th*. Soon after starting this morning, we ascended an elevated hill, the highest yet met with in the country. The road had followed up a rich and narrow valley, studded at intervals with oaks, and covered with luxuriant grass, when at length it wound around the base of the hill, and by a zig-zag course led to a point near its summit. Here I left the road and walked to the hill-top on the right. It had a conical shape, with a level surface, scantily covered with low shrubbery, and was about half an acre in size. A magnificent prospect here opened to the sight, surpassing in extent any thing we had seen in Texas. To the south, the view extended at least forty miles, losing itself in the distant hills, which were scarcely distinguishable from the pale blue sky of the horizon. On the east and west were elevated points, inclosing the valley through which we had for miles been winding our way. The hills around us presented a singular appearance, owing to their terraced sides. These terraces are formed by layers or strata of limestone, which jut out from the sides of the hills, the rains having washed away the soil. This was characteristic, more or less, of all the hills then in sight, though we afterwards met more striking ones as we journeyed westward. This peculiarity of the hills, from the plateau of Texas to the Missouri, has been noticed by other travellers, and is represented in many of the scenes given by Mr. Catlin in his work on the Indians. On the north side, whither we were directing our march, lay a broad and deep valley, exhibiting, even from the distance, a fertility of soil such as we had not before seen. This valley, as far as I could judge, appeared to be about twenty miles in length; though I think it extended further, its termination being concealed from view by the projecting spurs of the mountains. The whole was clad in foliage of deep green, so that it appeared like a dense wood. As we approached, we found ourselves in an open forest of live-oaks, without any under-growth of shrubs. The grass was nearly three feet high, and its strength showed the richness of the soil. After riding several miles through this beautiful valley, we forded the river Piedernales, there about one hundred feet in width, and entered the village which glories in the name of Zodiac, a Mormon colony of one hundred and fifty persons, under the especial care of Elder Wight, as designated by the faithful, though among worldly sinners he bore the appellation of "Colonel."

Sending the train forward by a more direct road, I drove, with twelve of my party, to the house of the Mormon leader. To a request that dinner might be served to us, if it was his custom to entertain travellers, he readily expressed assent, and ordered the meal to be prepared.

Every where around us in this Zodiacal settlement, we saw abundant signs of prosperity. Whatever may be their theological errors, in secular matters they present an example of industry and thrift which the people of the State might advantageously imitate. They have a tract of land, which they have improved for about three years, and which has yielded profitable crops. The well built houses, perfect fences, and tidy door-yards, gave the place a home-like air, such as we had not before seen in Texas. The dinner was a regular old-fashioned New England farmer's meal, comprising an abundance of every thing, served with faultless neatness. The entire charge here for a dinner for twelve persons, and corn for as many animals, was three dollars—a modest demand, which strikingly contrasted with the Astor House prices of a Mr. McGrew, and some others, between Indianola and Victoria.

The Colonel said he was the first settler in the valley of the Piedernales, and for many miles around. In his colony were people of all trades. He told me that his crop of corn this year would amount to seven thousand bushels, for which he expected to realize one dollar and twenty-five cents per bushel. Finding that I had not the means to transport the corn I should absolutely require for my journey, I struck a bargain with Colonel Wight for another team, consisting of a wagon and four mules, which he agreed to deliver to me at Fredericksburg.

Taking leave of our Mormon friends, we rode on two miles, to an encampment of Delaware Indians. Stopped to see a chief, whom I was advised to employ to accompany us to El Paso, where he had been with other parties, and who, from his acquaintance and influence with the Indian tribes on our route, might be of great service. Unfortunately he was absent, and not expected to return for a week. This people did not present a flattering appearance, and seemed to have few more comforts than the wild and unsubdued tribes we afterwards met. A mile further brought us to the United States military post, called Fort Martin Scott, under the command of Colonel Stannaford. This was the most extreme post on the frontier. We were kindly received by the officers here, and furnished by the acting commissary, Lieutenant Blake, with such provisions as we stood in need of. After an hour's delay, we rode on, about two miles further, to Fredricksburg, and pitched our tents on an open spot in the centre of the village.

This is a flourishing German settlement, founded about three years before our visit, or in 1847, and has a population of about five hundred souls. There were but few Americans to be seen. The stores were filled with goods adapted to the Indian trade, as the place is on the very borders of civilization, and resorted to by numbers of the Indian tribes contiguous.

CHAPTER IV.

FREDERICKSBURG TO HORSE-HEAD CROSSING.

Projected route through the wilderness—Setting out—Uninviting appearance of the country—Precarious condition of German settlements on the Llano River—Leave the Emigrants' Road—Crossing of the San Saba—Community of prairie dogs—Kickapoo Creek—Hints to future travellers—The Mezquit—Visit of Lipan Chiefs—Indian dexterity in mule catching—Regain the Emigrant Road at Concho River—Horse wounded by a rattlesnake—Character of country and vegetation—Mustang roads—Scarcity of water—Prairie on fire—Deceptive maps—Castle Mountains—Stray cattle captured—Pecos River—Chapporal—"Indian sign."

September 15*th*. Remained at Fredericksburg today to procure our supply of corn, and made the acquaintance of many of the citizens, among them Captain J. L. Ankrim, since appointed Judge of El Paso district. I was exceedingly anxious that Judge Ankrim should accompany us to El Paso. He had been on the road several times, and directed its construction; moreover, his intimate acquaintance with the country and knowledge of the Indian character were such, that I believed he might be of essential service. But his engagements were of such a nature as not to permit his leaving at the time. I felt much disappointed, and a heavy responsibility resting on me, in having to conduct such a party across a country but little known, a distance of more than six hundred miles. Not one of us had any experience in crossing the prairies beyond what had been gained in coming up from the coast. None had ever encountered any hostile Indians, or suffered the hardships which inevitably attend a journey in the wilderness like that before us. I endeavored to procure a guide in San Antonio, but was unsuccessful, and, in the last emergency, took a man who had driven a team some months previous in a train which came to this place from El Paso. Judge Ankrim gave me much information about the route we proposed taking, and advised me to leave the Emigrants' Road, which passes by the old fort on the San Saba, and take a more northerly course. He said there had been no rain for several months, so that the small streams might be dry, and the grass poor; and that to cross the tributaries of the Colorado nearer their union with that stream would insure a greater probability of finding water and grass. There was no road or trail along the route he recommended, until we should strike the Concho; but he marked the courses down on my travelling map, so that I anticipated no great difficulty in finding my way. We were to continue on the Emigrants' Road for several days, until we crossed the Llano River. About two and a half miles from this stream the Judge said we would see a mezquit tree close by the road, on the right, and a broken limb of another tree suspended from one of its branches. At this tree we must leave the road, which has a westerly direction, and strike off to the northwest; soon after which we would cross the San Saba River. Continuing this course, we would then meet the south branch of Brady's Creek, and next the north branch of the same. The latter we must follow to its source, which lay in a westerly direction. Here we should find some small pools or springs. From this point we were to take a course due west, crossing many streams, which are laid down on the maps, until we discovered two conical hills or mounds. Between these we must pass, when we should see the Concho River about seven miles distant. Striking that at the nearest point, we would find the Emigrants' Road once more, which we had only to follow to its termination on the Rio Grande.

October 16*th*. As the corn contracted for was not delivered until late, the train did not get off before twelve o'clock. The first watering place was seven miles distant, beyond which I was advised not to go, as it was then late, and it was a good day's journey from that to Hickory Creek. The road was much better than it had been beyond Fredericksburg; the country was covered with grass, and wooded, as it had been since we passed the Guadalupe.

October 17*th*. Left at 7 o'clock, and a few hours after came to an old Indian encampment. The country now assumed a different aspect: ledges of granite and fragments of quartz appeared, and the entire surface was much broken; the oaks were fewer and of less size; mezquit trees were scattered among them, with here and there a cactus. It was, on the whole, the most interesting country we had seen since leaving San Antonio. A reddish sandstone appeared in some places, the debris of which imparted its own hue to the soil. Weather oppressively hot, the thermometer at 90° Fahrenheit. Rode eighteen miles and encamped on Hickory Creek, a small stream at any time, but now dried up. On a closer search, a few water-pools were found, which were sufficient for our purpose.

As according to our maps there was a German settlement on the Llano about fifteen miles from our road, I determined to send a party there to purchase a load of corn for our animals. Mr. Thurber and three others constituted this party. It was small to enter an Indian country; but being without wagons or other property, save their animals, and moreover being well armed, there was no danger of an open attack by the Indians. A surprise was all they had to fear.

October 18*th*. Left camp at 6 o'clock; Mr. Thurber and his party at the same time striking off on a trail which ran in a northeasterly direction. Thermometer stood at 60°, with the wind northeast. The country assumed a more agreeable aspect than yesterday. Live-oaks prevailed, with a few mezquit; the former large and in thick groups. Passed several valleys more thickly wooded. Reached the Llano at 11 o'clock.

Found two deserted houses, with out-buildings and inclosures. Were informed at Fredericksburg that the Comanches had attacked this place about six months before, killed one man, and driven away the rest: it has not since been occupied. I could conceive no reason why a few settlers should come so far into the midst of an Indian country, when land equally good and cheap might have been had near a settlement. The situation, it is true, is a very fine one, on the banks of a clear and beautiful river, with water power in abundance and timbered land. But all these, even if given to the occupant, are of little value when life and property are unsafe. A number of hogs were running about quite wild, of which a couple were killed, to add to our stock of fresh meat.

The Llano is the finest stream we have yet met in Texas, the Guadalupe alone excepted. Where we forded it, it was two feet deep and one hundred and fifty in width. At a short distance was a rapid, with fall enough for mills. On the opposite bank we found the traces of a large Indian encampment, which, from appearances, must have been occupied a long time: it was probably the habitation of those who destroyed the settlement referred to. Left for Mr. Thurber and his party a note affixed to a pole, stating that we had passed on. After getting our teams up the opposite bank, which was very steep and rocky, and attended with considerable difficulty, we continued our march nine miles over a fine country to Comanche Creek, a small stream then nearly dry. Where we encamped, there was no running water; the little that remained stood in pools among the rocks in the bed of the stream. It was, however, clear and very good. In one of these pools, not exceeding sixty feet in length and eighteen inches in depth, I saw a number of mullet from ten to fourteen inches long, and several gar-pike about two feet in length. There were no small fish in the pool, the gars having doubtless devoured them. Some of our men got into the water with bushes, drove the fish to one end of the pool, and caught some of the mullet, which proved to be good eating. The water line on the banks of this stream showed it to be some six feet below its ordinary height.

At sunset Mr. Thurber and his party rejoined us. He reported that he had visited the German settlements as instructed. The first one presented a scene of desolation seldom witnessed, owing to the predatory incursions of the Comanches, and was on the point of being abandoned. The other, called Zastel, contained twenty-six houses; though but nine families remained, and the wives and children of most of these had been sent away to New Braunfels and other places. These people, living as they do upon the very outposts, are so completely at the mercy of the Indians, that it is doubtful if they succeed in braving it out. Their houses are very small, built of squared logs, and furnished with loopholes for rifles. The land is poor; and there seemed no attraction about the place, except the beautiful Llano, which is a most picturesque stream, now rushing in rapids over a rocky bed, and now spreading into broad and quiet lakes.

On their way back the party met a band of Caddo Indians, a small but mischievous tribe, returning from a horse-stealing expedition. They spoke some English, and had a number of fine animals with them, which they said they had taken by way of reprisal from their enemies the Wacoes. But the knowing look which one of them put on when Mr. Thurber expressed a doubt of the story, and the fine condition of their horses showed pretty plainly that they had been among the settlements.

About midnight a party of Germans reached camp with about twenty bushels of corn, which proved a valuable accession to our stock, and made up what we had been feeding out.

October 19*th.* All up before day; dispatched breakfast, struck tents, and were off at 6 o'clock. The morning was clear and cold, the mercury standing at 36° at sunrise. This low temperature affected us sensibly after the very hot weather we had had. The country was thinly wooded with live-oak. Passed a range of high hills, with two conical ones standing directly in our path, between which we passed. Left my mule and walked to the summit, whence there was presented a fine view of the surrounding country, consisting of an alternation of hills and prairie, with scattering trees, chiefly mezquit. Leaving this valley we ascended to a plateau, the surface of which was quite level. We now looked anxiously for the mark, where Judge Ankrim directed us to leave the Emigrants' Road, and soon discovered a broken limb suspended from a tree, precisely as described to us. Here, with some reluctance and not a little uneasiness, I left the beaten road and struck off into a broad and open prairie in a northwesterly direction, with no trail or path, and no guide but my compass. The man hired at San Antonio proving entirely ignorant of localities and destitute of useful information, I sent him to the rear of the train, preferring my maps and compass to his doubtful suggestions. Had the country presented a pleasant aspect, we would have entered the untrodden field with more satisfaction; but, unfortunately, a recent fire had burned off all the grass, destroying every green thing and leaving only a black stubble, from which slabs of limestone protruded. The soil appeared good.

We had hoped to meet the San Saba River soon after leaving the road; but coming to a small stream at 4 o'clock, with water standing in pools, and a little patch of grass near, which had escaped the fire, I deemed it prudent to go no farther, but encamp, rather than continue our march without knowing the exact distance to the river. It is always advisable to encamp early enough to procure wood and water, and make all the necessary arrangements before dark. We generally endeavored to get into camp in season to let our mules graze two or three hours before nightfall; but in some instances this was impossible, as our daily marches were governed by the state of the grass and facilities for procuring water. If we struck a spot with these important necessaries by two or three o'clock in the afternoon, we encamped. In some instances we even stopped at twelve o'clock, while in others we kept on our way until dark.

October 20*th*, *Sunday*. I would gladly have remained in camp to-day, agreeably to my original intention to rest on Sundays; but it was of the utmost importance that we should push on as fast as possible, having barely provisions enough for our journey. Besides, there was scarcely grass enough for another day's feed on the little spot where we were encamped. Early in the morning, therefore, I sent off parties to seek the San Saba River, and a place to cross it. We were occupied an hour or two in securing some mules which had got loose during the night; but by the time the animals were hitched up, reports came in that the river was within a mile of us, and a fording place had been found. We soon after got off, and, crossing some steep and rocky hills, reached the ford. The horsemen led the way across the stream, which was very clear, and flowed over a smooth limestone rock. But the opposite bank was found to be impassable for wagons. Set all hands at work, some in levelling the bank, some in bringing logs, boughs, and stones, while a passage through the thick wood which grew along the river's margin was opened with axes by others. In an hour all was ready. The teams were now brought over singly, and by hard pushing and pulling they were all got safely up the bank.

Near this crossing, we observed fine burr oaks; and the ground was strewn with their enormous acorns, with beautifully fringed cups. A gradual ascent over a rocky surface brought us again to the level of the table land beyond. We continued our way over gentle hills, pretty well covered with mezquit and live-oaks, for about six miles, when we reached Camp Creek, a small stream, dry in many places. Stopped an hour to water our animals and take lunch, as it was my determination to reach Brady's Creek, about sixteen miles distant.

The ground ascended gradually from this point for several miles, when we struck a more open country, on a level plateau, which continued without interruption during several hours' march. On this plateau we entered a colony of the misnamed "prairie dogs," which extended in every direction as far as the eye could reach. The ground occupied by this fraternity was distinctly marked by the shortness of the grass, which these little creatures feed on, as well as by their hillocks, some of which contain two or three cart-loads of earth, brought up by them from their excavated dwellings. We tried in vain to get one of them as a specimen, dead or alive. At least twenty shots were fired at them, both with pistols and rifles, by several individuals of the party, who considered themselves good marksmen; but they either dodged at the flash, or, if shot, fell into their holes, at the mouth of which they invariably sat. Not one was obtained. On examination, drops of blood were seen near the holes, which showed that some of the shots took effect. In one instance I saw a rattlesnake enter one of the habitations; but whether he belonged there or was an interloper it was impossible to tell. Small brown owls flitted about, and lit on the little hillocks in the midst of the prairie dogs, with which they seemed to be upon good terms. For more than three hours our march continued through the vast domains of this community, or "dog-town," as they are usually called, nor did they terminate when we stopped for the night.

The country passed over to-day was very smooth and hard, and excellent for wagons in any direction. The grass was poor. The only trees seen were mezquit, which we here found for the first time in fruit.

The plain suddenly terminated by a steep descent of about 150 feet, to another, which extended along its base, and through which ran Brady's Creek (south fork), where we encamped. Like the other water courses we had passed, this was nearly dry, and existed only in pools. Quails were abundant here; and by the time my cook had his fire ready, I had a dozen of these delicious birds ready for him. Estimated distance travelled to-day, twenty-five miles.

PRAIRIE-DOG TOWN.—p. 70. vol. i.

October 21*st.* The night had been quite cold. The morning was clear and pleasant. Left at half-past six o'clock. The colony of prairie dogs continued the whole of this day's march, with scarcely an interruption. Our course was more westerly, over a level and open country, covered with short mezquit grass, and studded with small mezquit trees, uninterrupted by either hill, rock, or valley. We kept steadily on by the compass until we struck the north fork of Brady's Creek, sixteen miles from our last camp. Stopped on its banks two hours to water and graze the animals, a longer time than was necessary, or than could well be spared; but our mules got frisky, and it was difficult to catch them. I determined not to make a noon halt again, but to push on until we should reach our place for encamping. This course is recommended by all experienced men who have had charge of trains. A stop cannot be made at noon, if the mules are taken from the wagons, without consuming two hours, which cannot be spared, unless a very long march is to be made, and continued during a portion of the night. Then it becomes necessary to stop to rest and feed. Reached what I supposed to be the head of the creek at half-past three o'clock; at least my guide stated such to be the case, and that we should not meet water again for thirteen miles. We therefore encamped here, though the grass was very poor, having been recently burnt, and the new shoots but just appearing above the ground.

October 22*d.* Delayed this morning until half-past eight o'clock in searching for four mules, which got loose during the night and disappeared. Such is often the case when the grazing is poor; and parties should take particular care on these occasions to see that their animals are well secured. Left three or four men to continue the search after the mules, as we had no animals to spare. Found Brady's Creek did not terminate here, as my guide stated, but led towards the south-west. Followed it three or four miles, then crossed it, and took a course a little north of west, and reached a pool of deep water, with excellent grass on its margin, about four o'clock. Believing this to be the head waters of the creek we had been following, and having travelled nine hours pretty steadily, determined to stop here for the night. The country passed over to-day has been very flat, and of the same character as that the two days previous. As we are now on the high table-land, the trees diminish in number and in size. A few mezquit trees, stunted, deformed, and decayed, appear on the prairie, and occasionally a "*mot*" of live-oaks. The community and domain of the prairie dogs, which we entered two days ago, continues.

The men we left to search for the missing mules rejoined us, and, greatly to my disappointment, without the animals. They had scoured the country for miles around; and having seen "Indian sign," as it is termed, about a mile from our trail, keeping by us for many miles, they believed our mules had been stolen, and that a band of Indians were following us. It is not necessary that the savage should be seen, to judge of his presence. He always leaves marks behind him, which are soon understood by the sagacious travellers of the prairie, and are as unmistakable as his own red skin.

October 23d. Got off at six o'clock, an early hour for the season; but it is an advantage for travellers in this region to push on as far as possible in the early part of the day. Even now the heat of the sun at mid-day was great, and the shade of a tree refreshing. To move at six, it was necessary to call the cooks at three o'clock, and to take breakfast before day. After this the cooks and servants had to take their meal, the cooking utensils were to be washed and stowed away, the tents struck, and every thing put in its proper place in the wagons.

Two miles brought us to Kickapoo Creek, and three miles more to a small pool, with a river running through it, marked on the map as "Potato Spring," where we stopped to water our animals. Continued our route towards an opening or pass in the elevated ridge, which stretched across our path, in a direction from north to south, called "the divide." Noticed a sudden shelving off on the north side of the highest portion of the ridge, directly in our front, where we supposed the pass to be. As we approached we could discover no opening; and the point towards which we had been moving was so rocky as to seem utterly impracticable. To the northward the ridge appeared less abrupt and rocky, which induced me to deviate from the prescribed course. The ascent was gradual, but quite rocky. For six miles or more we held our way over the dividing ridge, which proved very tiresome to our animals. The hills were entirely destitute of trees and shrubs; and as the grass had been recently burned off, the prospect before us as far as we could see was extremely barren. North of us, at a distance of two or three miles, the ridge we were crossing terminated, and beyond it lay a broad and open prairie, extending to the river Concho, the course of which could be distinctly traced by a long line of dark foliage meandering through the plain.

I would recommend future travellers who may follow my trail, or any other road passing this way, to leave the stony ridge we had been crossing to the south, and keep on the plain, where the soil is hard and smooth. The distance might be increased a couple of miles, but it could be accomplished in less time, and with less fatigue to the mules, than the toilsome passage of six miles, over steep and rocky hills, endangering the wagons, and injuring the hoofs of the animals.

Descending the range of hills, we passed the dry bed of a water-course, and reached a stream called Antelope Creek, one of the tributaries of the Concho River, at five o'clock, where we encamped.

Our route to-day had been over a level prairie country, deficient in wood, save a few scattering mezquit trees of diminutive size, and light grass, indicating a poorer soil. We have noticed as we advanced westward, and ascended the high table-land of Texas, an inferior soil, and, as a necessary consequence, a more scanty herbage. The beautiful live-oak, which abounds in eastern Texas, and which grows luxuriantly in the valleys as far as the north fork of Brady's Creek, had now disappeared, save on the immediate banks of water-courses. The mezquit, too, which grew large and thrifty on good soil, had now either disappeared or dwindled into a diminutive tree or mere shrub.

The mezquit (*Algarobia glandulosa*) is an important tree in this region, and is mentioned by various travellers as mezkeet, musquit, muckeet, &c.; it belongs to the same natural family as our locust, which it very much resembles in appearance. The foliage is more delicate than that of the locust. The wood is hard, fine-grained, and susceptible of a high polish; and were it not difficult to obtain it sufficiently large and straight, it would be much sought after for cabinet making purposes. The tree seems to suffer from the attacks of insects in a similar manner with the locust. The mezquit bears a long and narrow pod, which, when ripe, is filled with a highly saccharine pulp. Horses and mules are exceedingly fond of these, and will often leave their corn for a feed of the mezquit beans. Its great value is for fuel, for which purpose it is not surpassed by any of our northern woods. Where the prairies are frequently burned over, the tree is reduced to a shrubby state, a great number of small branches proceeding from one root, which goes on developing and attains a great size, though the portion above ground may not be more than four or five feet high. These roots, dug up and dried, are highly prized for fire-wood, and form, when thoroughly ignited, a bed of lasting coals, much like those from the hickory of the North.

The water of Antelope Creek is clear and sweet. Large oaks and pecans grow upon its banks, from the latter of which we gathered a quantity of its excellent nuts. To the north, saw ranges of mountains far beyond the Concho, a broad plain intervening. To the south were hills within a few miles, quite barren in appearance. Passed several communities of prairie dogs, with the same interlopers before noticed, the rattlesnake and owl. I also observed rabbits among them, which took refuge in their underground dwellings. Flocks of plover were seen to-day on the barren hills. The jackass-rabbit also crossed our path occasionally; but it sprang up so suddenly, and darted through the low chapporal or bushes so rapidly, that I could not get a shot at one. Some catfish and trout were taken in the stream within a few rods of our camp. The men who were out with the mules reported that they had seen fresh Indian signs near us, which caused us to keep a diligent look-out.

October 24*th*. Just as we were leaving camp this morning, in fact after I had myself started, and was looking for a place to ford the stream, an Indian mounted on a mule suddenly appeared from behind a clump of bushes, and the next moment was in the midst of the camp. He advanced to the nearest party with his hand extended, and was received in a friendly manner. As soon as salutations had been exchanged, he hastily drew from his pouch a packet, and, after undoing sundry wrappings of buckskin and paper, drew forth several documents, which proved to be from various American officials. The first was from Judge Rollins, Indian Agent; the others from our military officers, certifying that the bearer was a Lipan chief of eminence, named Chi-po-ta, with whom a treaty of peace and friendship had recently been made, and asking the protection and kind treatment of all Americans who should pass through his country.

This chief was about sixty years of age, rather corpulent, owing to the life of ease which he gave us to understand he had been leading, and was mounted on a mule so disproportionately small, as to present a most ludicrous appearance. He had a pleasant, benevolent countenance, and bore so striking a resemblance to the portraits of General Cass, that every one noticed it. He was well dressed in a suit of deerskin, with his bow and arrows slung across his back: these were inclosed in a beautiful case made of the skin of the American leopard, and he wore a pouch of the same material by his side.

He spoke Spanish tolerably well, Mr. Cremony acting as the interpreter, and was immediately brought to me. He said that he had discovered our trail two days before, and had since watched us, keeping at a short distance. That his people were encamped a few miles off, having removed the day before. Chipota knew enough of civilization to be aware that when distinguished gentlemen meet, it was customary to take a drink; and finding no proffer of such civilities on my part, he gave me to understand that he would not object to a glass of whiskey. I told him that we were Americans who always drank water, and consequently were not provided with whiskey, an assertion that he seemed to doubt. I added, however, that if he would accompany us to our next encampment, I would give him a shirt and something to eat. As we intended to encamp after a short march, in order to give our animals an opportunity to graze, I asked him to take a seat in my carriage, an invitation which he accepted with a delight that showed itself in spite of his endeavors to maintain his gravity. Contrary to the custom of his race, he manifested much curiosity respecting all he saw; for the carriage was well filled with a variety of knick-knacks which were new to him. The revolvers and other fire-arms interested him exceedingly. My Sharp's rifle which loaded at the breech and primed itself, surpassed all his previous conceptions; and after that, he was prepared for any thing in the shooting line. Taking up my spy-glass, which he supposed to be some other contrivance of the sort, he wished to be shown how it was fired off. The instrument was adjusted, and a distant tree pointed out, which he was told to look at with the glass. His credulity had been overtasked, and it was hard to convince him that it was the same far-off tree. I told him that we used that to see the Indians at a distance, and could always tell when they were about, or had stolen any mules. In mien and conduct the old chief was extremely dignified and self-possessed, although his Indian gravity was not proof against the jovial conduct and expressions of our little company, all of whom took an interest in this first specimen of the wild denizens of the prairie that we had met with. Many a blithe smile wreathed around his lips; and now and then a hearty laugh would ring out from the depths of the old man's heart, with a right good will. Finding that he had mules, I requested him to bring them to our camp, and also to let us see his people.

Five miles over a flat country brought us to the South Fork or Boiling Concho. The stream is deep, clear, and in many places rapid. Crossed it, after some little search, over a ledge of rocks, and stopped to water our animals. The flat country continued, with a few mezquit and an occasional live-oak. The grass good. Passed Dove Creek, a small stream filled with rushes; and a ride of four miles further over a similar country to that before described, brought us to Good Spring Creek, a stream of clear cold water. It was yet but one o'clock; but as the grass was unusually fine, with wood and water in abundance, I determined to rest the remainder of the day.

Our course to-day had been due west towards the Green Mounds, the land-marks alluded to by Judge Ankrim, the sight of which we all hailed with pleasure, as they satisfied us that we were in the right track. To the north we had seen the twin mountains, standing far and alone in the prairie, which are laid down on the map. The stream looked so inviting, that the fishing tackle was got out, and some twenty-five black bass and catfish taken. These were divided among the messes, and made an acceptable meal. A few ducks and quails were also shot here.

An hour or two after we encamped, Chipota returned with Chiquita, another chief, and several others of his band. This was a man of some consequence too, as he gave us to understand; and such was proved to be the fact by the certificates he presented "defining his position," which requested kind treatment from all Americans. He was about the age of Chipota, and similarly dressed. With them were three others, one a remarkably fine-looking young man, of athletic form, which he took pride in displaying. He wore no garment but a breech-cloth and a necklace of bone, and was decorated with a few patches of vermilion. At first he strutted around the camp, with an evident design of making a sensation, and to convince us that he felt it a condescension to associate with us; but he afterwards became quite familiar, particularly with those who could hold a conversation with him in Spanish, which he understood well, and spoke a little. He asked one of our young men if he was married. The latter, as such happened not to be the case, was somewhat confused, not liking to acknowledge the fact, as he feared it would lower him in the estimation of his savage friend, who moreover might take it into his head to offer him one of his red-skinned sisters for a spouse, to refuse which would give mortal offence. Without replying, therefore, he exhibited a miniature of a beautiful woman, which he carried around his neck, and which quite enchanted the red-skin. He expressed great admiration at the picture, and never seemed tired of gazing at its mild countenance, with its bright eyes smiling upon him. The next morning before leaving, this young Indian made his appearance at the tent of the owner of the miniature, and endeavored to purchase it, offering in exchange his bow, arrows, tiger skin, and finally his horse. Failing to acquire it, the young man begged one more sight of the enchanting image, which he was permitted to enjoy; he gave it one long and affectionate look, leaped upon his horse, and rode off.

Chipota brought with him one mule, which I bought, and would gladly have taken more; but whether these people had them or not, no more could be obtained. I also offered them ten dollars each, or goods to that amount, if they would bring in the few mules we had lost; but they adhered to their first assertion, that they had not seen them. As they showed no inclination to leave, we were obliged to give them a supper, after which they asked permission to remain all night with us. This I felt reluctant to grant, not knowing but some treachery or trick might be meditated, such as running off our animals during the night. On further reflection, however, I consented, on condition that they remained by the fires without the encampment—at the same time warning them, not to come near us in the dark, lest our guard should take them for Comanches and shoot them. They obeyed my injunctions, and remained quietly by the fires. The night was rather cool, and day had scarcely dawned, when I was aroused by a tap at the window of my carriage, in which I slept. Rising up, I found old Chipota there shivering with cold. On opening the door, he whispered, "Mucho frio—poco de viskey:" Very cold—a little whiskey. I was compelled again to deny the old man, but compromised the matter soon after by giving him a bowl of hot coffee.

The Lipans are a large and warlike tribe, extending from Zacatecas, in Mexico, to the Colorado of Texas. In fact, they rove from the sea-coast to the borders of New Mexico, and have as wide a range as the Comanches. During the winter, they remain in the Bolson de Mapimi, a vast region lying west of the Rio Grande, which has few inhabitants, except the untamed Comanches and Lipans. The portion of the tribe in Texas are at present on friendly terms with the whites, but are sworn foes of the Comanches, whom they profess to hold in great contempt. The Lipans, in common with the Indian tribes of Mexico, and of the States formerly belonging thereto, speak Spanish, some of them with tolerable fluency.

October 25th. One of our mules got loose this morning; and after an hour and a half spent in trying to catch him, the teamsters gave up the chase. I then offered the young Indian a red shirt, if he would perform the job. He leaped on his horse without a saddle, took a long lasso or rope in his hand, and dashed off at full speed, followed by several of our men, after the mule, who, seeing his tormentors approach, took alarm and ran with his utmost speed. The race was quite exciting, and for a little while, it seemed doubtful which side would win. At length the Indian got within about forty feet, when, with a vigorous effort he threw the lasso over the mule's head, and at once brought him to a stand. All seemed to enjoy the sport much; and the Indians, who had each received from us presents of shirts and trinkets, parted from us, apparently delighted with their visit.

The creek was five or six feet deep near our camp, but after a little search we found a bare rock near a fall, where we made an easy passage across. An hour after leaving, reached a branch of the stream we had left, which we followed in a course to the west-southwest for five or six miles, before a fording place could be found. The water was deep, and the banks abrupt. Crossing this stream, we again pursued a due west course until we struck Lipan Camp Creek, which, as well as all the other streams we have crossed since leaving Brady's Creek, are tributaries of the Concho. We now made directly for the Green Mounds, which appeared but a few miles from us up a gradual ascent.

They lay north-east and south-west from each other, and the train passed directly between them. While the train moved along I ascended the easterly mound, accompanied by several others, to see what was the character of the country before us. These mounds or hills are about five hundred feet high, and had been but recently burnt over; hence their color was far from being green. Not a blade of grass was to be seen. A few half-burnt bushes and tufts of the yucca were all the vegetation that remained. From the summit we saw the line of the Concho River running in a northeasterly direction, some six or seven miles distant. Reached it at five o'clock, when, to our great joy, we again struck the Emigrant Road, which we had last seen south of the San Saba. Very few trains had passed over it, so that it was not more distinct than the roads or paths through a northern meadow.

We had now been travelling eight days over a district one hundred and fifty miles in extent, with no other guide than a compass. From the point where we left Brady's Creek, we had pursued a course as directly west as the nature of the country would admit, with no land-mark but the Green Mounds, which we had seen about forty miles before reaching them. In this march we had frequently crossed a single wagon trail, which we took to be that of Major Bryan, of the United States Topographical Engineers, who, in June and July of the previous year, had passed this way.*

The character of the country the last three or four days has varied but little. The soil is poor and the grass scanty, except near the water-courses, with but few trees. For a wagon road it is admirably adapted, and scarcely requires a spade, except at the river crossings, which might be improved by a little levelling. No animals, except wolves, antelopes, and rabbits, have been seen. Along the banks of the streams are pecan trees, from which we supplied ourselves with this delicious nut.

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* Since my return from the survey, I have seen the printed Report of the Reconnoissance made by Major Bryan, which convinces me that our routes were nearly the same.

An incident occurred to-day which deserves notice. Soon after leaving the Green Mounds a rattlesnake was seen in the path, and was passed over by my carriage. Mr. Cremony, who was riding immediately behind, discharged his pistol at it; and at the same moment the snake darted at the hind leg of his horse. He dismounted, and on examination discovered by a drop of blood the spot where the reptile had inserted his poisonous fangs. In less than half an hour after the horse began to limp and show the effects of his wound; and his lameness increased until we reached our camp an hour later, by which time the leg had greatly swollen as far as the thigh. Dr. Webb now got out his medicine chest, shaved the hair from the wound, and applied some remedy. He also scarified the place and used the air-pump, but nothing seemed to check the swelling. The horse was now unable to stand, and thus he was left till morning.

October 26*th*. From our camp the Concho runs east for a mile, then north-east for about twenty miles, and afterwards in an easterly course again for about one hundred and twenty miles, when it empties into the Colorado. Near our camp, and for some distance on either side, the stream flowed between banks about fifteen feet high, and was very muddy and shallow. A variety of trees with thick brush grew upon its immediate banks. There was no valley or bottom land, and the country for miles adjacent was quite barren, though it is said that catfish abound here; but our attempts to capture some were unsuccessful.

Left camp at sunrise and forded the river a few miles above. Crossed a branch at the south, and another on the north side of the stream, both quite small. Passed some deep *arroyos*, or dry beds of streams. Sent scouts ahead to look for the last water, where I intended to encamp and give my animals rest before attempting the desert that lay beyond. The stream continued to grow less as we advanced, finally losing itself in marshes or settling into mere pools. It also became so salt as to be undrinkable. The scouts on their return reported that the water grew salter ahead, and that the banks of the pools were covered with incrustations of salt. With such a prospect before us, I thought the more prudent course would be to retrace our steps a mile, to a pool where the water, though far from being good, was palatable, and where there was excellent grass. At half-past two got into camp.

During the whole day we had seen great quantities of wild ducks, of which twenty-five were shot, also two large brandt. The whole party feasted on game to-day, which we relished much, having tasted no fresh meat since leaving Fredericksburg. I procured a supply there, which I hoped would last four or five days; but the great heat had rendered it unfit for use after the first day.

The river or rather creek followed to-day, ran through a valley quite barren, save on its immediate banks, where the grass was good. No trees were seen, except here and there a small clump near the water-pools. During the whole day's march ranges of barren hills lined the valley, which sloped gradually to its bottom. Estimated distance travelled to-day by the map, twenty-five miles.

Our wounded horse seemed somewhat improved this morning, though his leg was still much swollen. He was led, and, as our movement was slow, kept up with us without difficulty. On reaching camp, he did not appear the worse for his march.

October 27*th*. Continued along the valley of the Concho for eight or ten miles, and encamped at noon near a pool of brackish water, which our scouts reported to be the last they could find; and every appearance indicated a cessation of this necessary supply. To the west the valley seemed to terminate with the adjacent hills, and the open desert or prairie to commence immediately beyond. Expecting therefore no water until we should reach the Pecos, sixty-five miles distant, and knowing that the jornada which we had to cross furnished little grass, I determined to remain here the rest of the day, as the grass was very good and abundant. Our water-kegs were accordingly filled, as well as all the canteens, jars, bottles, and flasks that we could muster. Food was cooked; and it was determined that there should be no stop beyond an hour or two, to let the animals rest and graze, in case grass should be found. The wagons were reloaded, so that each should carry an equal weight. Many ducks were killed in the water-pools. The road from our last camp has been good.

October 28th. The camp was aroused early; and after taking a cup of coffee, we resumed our journey, about an hour and a half before sunrise. Sent four men ahead to find the road. The hills extended some eight or ten miles towards the desert, when they gradually fell off into the plain. The desert was not, as I supposed, a level surface, but a succession of slight elevations. Every thing bore the appearance of extreme barrenness; not a tree could be seen. Mezquit chapporal, or bushes from three to five feet in height, were thinly scattered over the plain. The wild sage and Larrea Mexicana, the prickly pear and other kinds of cacti, constituted the vegetation of this desert region. Grama grass (*Chrondosium*) grew in some spots, and, though completely dried up, was eaten with avidity by our animals. Antelope were seen in great numbers, but so shy, that in the open plain we could not get a shot at them. Colonies of prairie dogs were occasionally observed; and from the numerous burrowing places of greater or less size, it was evident that other animals found a dwelling among them. A few rabbits were also seen bounding over the plain, and disappearing in their holes or among the bushes. Several shots were fired at them without success. These barren regions do not furnish many of the feathered tribe: a couple of prairie fowls, a flock of large curlews, and a few meadow larks and sparrows, were all that were seen.

About twenty miles from our last camp we passed a mud-hole, marked on the map as the "Mustang

Ponds." It was a slight depression in the prairie. Not a particle of water was to be found, nor did there appear to have been any for a long time. The earth was much trampled by deer and mustangs, which had doubtless resorted here in numbers for water. Made our breakfast from bits of cold meat and bread which we had taken with us, and did not stop the train until three o'clock, P. M. Finding a spot where there was plenty of dry grass, the train was stopped and the animals turned out to graze. The poor creatures seemed much fatigued, having been in harness ten hours without water or food. They ate the withered grass and browsed on the twigs of the mezquit bushes with eagerness. Gave each animal one gallon of water. They could not have suffered much for want of this, as the weather had been quite cool during the day. Built fires with the dry bushes, and made coffee. No meat was cooked. Our cold pork, and some of the ducks that remained from yesterday, with hard bread, gave us a luxurious dinner. At least so it seemed to us; for on no day since we commenced our journey had we relished a meal more. The cool and bracing air of the prairie had given all good appetites.

Had a narrow escape from one of those accidents which, in spite of every precaution, will sometimes occur. One of the cooks, contrary to my express orders, built his fire near the dry grass without digging a hole. The grass took fire, spreading on all sides, and advanced with fearful rapidity towards the wagons, in the direction of which the wind was blow, ing. All hands ran to the rescue with blankets and cloths to beat down the fire; and those who could not in the hurry of the moment get any thing else, took their coats and hats to battle with the raging element. Some ran to the wagons to remove them; but before they could be got out of the way, the flames were about the heels of the men and the wagon wheels. The slightly-marked road where the grass was destroyed, offered a temporary check, and was of great help to us in bringing the fire under. Had it had one minute more the start, a hundred men could not have controlled it; besides, had it extended fifty feet further—which it would have done in half a minute—it would have reached our animals, and caused a general stampede among them, resulting, doubtless, in the loss of many. We should then have been in a sad plight, thirty miles from water, and two hundred and fifty from the nearest settlement.

Such accidents have occurred, which have resulted in the destruction of trains. During the late war with Mexico, several wagons were burned by the grass taking fire.

The place marked "Flat-rock Ponds," where we were told water was sometimes found, was quite dry, nor were there any indications that there had been any there for months.

October 29th. We had kept in motion the whole of the preceding night. A cold wind blew most of the time, making it very uncomfortable. It is not a desirable piece of exercise at any time to ride on horseback all night; but when a person has been in the saddle for thirteen hours the previous day, and continues the journey without rest, it becomes decidedly disagreeable; and when morning dawned upon us, all were pretty well used up. Nor could we now stop to rest. There was yet a long stretch before us to water, which must be reached at the earliest moment. During the night we passed the spot marked on the map as the "Wild China Ponds," which, like the places before referred to, was destitute of water. Great mischief is caused by marking such places on the maps; and had we not been told that it was doubtful whether water would be found there, we might have been unprepared with a supply, and have suffered accordingly.* From the spongy appearance of the ground near the water-holes, there is no doubt water might be procured by sinking wells, which ought to be done if this road is to be traversed.

Soon after daylight we halted the train, let the mules graze for an hour on the parched grass, made coffee, and such a breakfast as cold pork and hard bread would furnish. It was quickly dispatched, and the few minutes we had to spare before the wagons were ready to move were seized to have a little rest. Brief as it was, it was a great relief.

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* On my return from California in 1852, I met several parties of emigrants from Arkansas and Eastern Texas, who had followed our trail from Fredericksburg to El Paso, and who were loud in their denunciations of those who had advised them to take this road, and more so of those who furnished them maps, which deceived them as to the watering-places. They expected to find water at the localities designated on the maps, and took no precautions in case of meeting with none. On reaching the so-called "Mustang Ponds," they did not recognise them, and sought for them in vain for miles around. At the "Flat Rock" and "Wild China Ponds," they were equally disappointed. They looked about the desert without success. One party was seventy-two hours without tasting water, and came near perishing. Many of their mules and cattle died; and such as had strength remaining hastened on to the Pecos. There had been no water at either of the places designated during the spring or summer, nor was there any in October or November, when we crossed it.

Castle Mountain Pass, Texas.

Saw a low line of hills far off on our left, and immediately in front a range, called the "Castle Mountains," of considerable elevation. The road led to a gorge through which it was necessary to pass. These mountains derive their name from the projecting cliffs of limestone, which sometimes assume the appearance of castles. The pass was exceedingly steep, and the road tortuous, frequently running between rocky walls, so close together as to render it impassable for two wagons abreast. These walls were covered with immense cacti wherever the almost perpendicular surface would afford them a foothold. As we entered the pass, we found among the debris of the limestone rock numerous fossil shells. It became necessary here to lock the wagon wheels and advance with great care. We had not proceeded far, when, at an abrupt turn, one of the wagon tongues snapped off. Two hours were lost in repairing this injury, which was effected by lashing two tent-poles to the broken tongue. I took advantage of the delay, and strolled about on the summit of the mountain. Portions of this pass are so narrow, that a few Indians well armed could keep off a large body of men. In exploring some of the recesses of this wild and romantic spot I noticed many caverns, which, from the quantity of bones within, were evidently the habitations or resort of wild beasts.

On emerging from these mountains, on the western side, several moving objects were discovered. They were at first supposed to be Indians; but on applying my telescope, they were discovered to be cattle. Several of the men set off in pursuit, and, soon coming up with them, drove them to our train. They proved to be quite fat, and had evidently strayed from some herd or train which had preceded us.

The road here was so excessively sandy, that our nearly exhausted animals could scarcely draw the wagons through it. The sun beat down with fiery force upon us, and we had not a drop of water to relieve our thirst, or that of the poor beasts, who began to manifest their sufferings in the most piteous cries.

A march of twelve miles brought us to the river Pecos, on the banks of which, near the Horse-head Crossing, we encamped.

This river, which is the largest tributary of the Rio Grande, is here about 100 feet in width, and in the deepest part has four feet of water. Unlike all the other streams we had passed, the Pecos has not a single tree or shrub along its banks to mark its course, nor has it any valley or bottom land near. It runs with a dark rapid current between high perpendicular banks, cut through various strata of clay and sand. On both sides is a vast open prairie, entirely destitute of trees, though scantily covered with mezquit chapporal, and other plants of the desert. The soil is clay and sand, but so blended with saline matter that there is no vegetation save the plants mentioned. A few rushes grow on the margin of the river; but these scarcely appear above its banks, which are here from six to ten feet above the water. It is charged with an earthy substance, of a reddish or brown hue, which imparts its tinge to the water. As we approached, we looked in vain for the usual indications of a stream; for, owing to the want of trees or bushes, it was not seen until we were within a few yards of it. The Pecos resembles a great canal rather than a river.

During the latter portion of our route we first came into the proper chapporal, and met the plants peculiar to the flora of Mexico in such quantities as to give a character to the landscape. The term "chapporal," probably meaning a plantation of live-oak, is applied to the growth of shrubbery which forms a striking feature of the country. We have no similar growth at the North to which it can be compared. One may travel for days without seeing a tree higher than one's head; yet the whole country is covered with a thicket so dense as to be almost impassable to man or beast. The shrubs composing these thickets are, for the greater part, excessively thorny. The principal are shrubby mezquit; rosin wood, or creosote plant, a most disgusting, strong-smelling shrub; koeblerinia, called "junco" by the Mexicans, a plant armed at all points, every branchlet or twig being sharpened down to a spear; and various species of yucca. These last, particularly the kind known as Spanish bayonet, are truly formidable, their stiff sharp-pointed leaves being capable of inflicting a dangerous wound. The thorny shrubs enumerated, with various species of prickly pear and other cacti, make up an alliance which one soon learns to treat with proper respect.

We had no sooner got into camp than one of the fattest oxen we had just secured was killed; and such a treat of fresh meat as we had, cannot be appreciated but by those who have lived on salt pork for nearly three weeks. We made great calculations on having fresh beef the remainder of our journey, by driving the other two oxen with us; but during the night they escaped. We made a diligent search for them the following day, but they could not be found.

I have omitted to notice an incident that occurred soon after emerging from the pass in Castle Mountain. Anxious to find the Pecos, I sent off men to search for it. They returned much alarmed, declaring that they had seen "Indian sign," and pointed out to me in the midst of the vast plain that lay before us the well-known Indian signal of a puff of smoke suddenly rising from the earth. This is produced by making a fire in a hole, and then smothering it with leaves. The hole is suddenly opened, when the smoke rushes forth in a dense body, and rises high in the air in a perpendicular column. Such columns are often seen in traversing the deserts and plains, and cannot be mistaken. Not knowing but Indians were near, our arms were got ready, and every bush and rock we passed was carefully scrutinized. No Indians, however, were seen by us; although at the crossing and near our camp there were fresh tracks of a large number of mules and horses, with a few moccasin prints, which convinced us that a party of Indians had crossed within twenty-four hours of us.

CHAPTER V.

HORSE-HEAD CROSSING TO DELAWARE CREEK.

Crossing of the Pecos—Narrow escape from a cold bath—Desolate region—Prize oxen—Stray mule—Populous biscuit—Toyah Creek—Travellers' tokens—Rescue of lost mule—Dreariness and monotony of the Pecos—A horse's somerset—Delaware Creek—Snow-storm, sport, and Erman's Siberia—Mr. Thurber and others despatched to El Paso—Letter to Major Van Horne.

October 30*th*. After our fatiguing march of two days and one night without rest, we slept pretty late this morning; even the expectation of a fine beefsteak for breakfast could hardly induce either officers or men to turn out. After breakfast, I examined the river with a view of crossing, intending to devote the day to it, and recruit our tired animals. Found the water at the Horse-head Crossing, which was a quarter of a mile from our encampment, to afford the greatest facilities. Here there was a bank about half the height of the main bank, to which there was an easy descent, and one equally so to the water. It is the place where other parties seem to have crossed, and hence rendered easy of access. I noticed a long line of horse or mule skulls placed along the bank, which probably gave it the name it bears.

On sounding the river to ascertain its depth, we found that our ambulances (i. e. wagons mounted on springs) would pass over without wetting their contents. We therefore unloaded all the wagons but those on springs; and placing their contents in the latter, we succeeded in passing all our provisions, baggage, etc., over with but little trouble. The west bank was levelled with our spades, to make the ascent from the water easy. I remained with Dr. Webb and Mr. Thurber until all were over, except one empty wagon. This being quite low, its box would be partly immersed in the water; an ambulance was accordingly sent back for us, and for the contents of my carriage. We entered the stream, which just touched the bottom of the ambulance, but not without some fears, as experience had shown that the best and most gentle mules cannot always be depended upon. When we had reached about two thirds the distance across, or some thirty feet from the opposite bank, the mules either lost their footing, or were swept by the current into deeper water, a little out of the course taken by those which passed over before. Unable to contend against the force of the water, which was almost on a level with their backs, the leaders turned their heads down stream. The teamster, who was mounted as usual on one of the mules next to the wagon, endeavored in vain to bring them to their places with their heads towards the shore. The frightened creatures could not maintain their footing; and in struggling to extricate themselves, they extended their alarm to the other mules, who began to rear and prance in the water. Just at this moment the last wagon, which had been behind, attempted to pass us, the driver thinking the other mules would follow his team; but in the attempt, the current swept his wagon, which was half buried in the water, against ours. This brought his mules nearly abreast of mine, and led to greater confusion and alarm. Every moment we expected to be swept away; in which case our lives would have been in great danger, as it would have been no easy matter to extricate ourselves from the close wagon. I could do nothing but call for assistance from the party on the opposite bank, who stood watching our progress and critical situation with breathless suspense. Mr. Clement Young, seizing the end of a picket rope which lay on the bank, sprang into the river without stopping to divest himself of his clothing, and came to our relief. With great difficulty he succeeded in attaching the rope to the leading mules. Several other gentlemen mounted their horses and sprang into the water at the same time, some to urge the mules towards the shore, and others to extricate the two wagons. The picket rope was now seized by those on the bank, who, pulling with all their strength, brought the heads of the leading mules towards it. The teamsters then putting on the lash, and the horsemen in the water urging our animals forward, they relieved us from our perilous situation, and we gained the bank in safety.

My carriage was now brought over by lashing beneath it a few empty kegs, with two men in the water to keep it steady. A rope was taken ahead, by means of which the men on the opposite bank drew it safely across. We now pitched our tents, corralled the wagons, and, after a hearty supper, turned in for the night.

October 31*st*. Struck tents and left camp at 7 o'clock, following a northwesterly direction, keeping near the Pecos, the course of which we could occasionally trace by the rushes which grew on its banks. The country continues exceedingly barren and destitute of trees or shrubs, except the thorny chapporal, which generally grows on desert spots. A short grass appears here and there, but is now completely dried up, affording but little nourishment to the animals. Beautiful yuccas were seen in many places, seeming to thrive in the barren soil. Our constant companion, the prickly pear, with other varieties of the cactus family, were content, too, to flourish in these dreary abodes.

The only living creatures seen to-day were a few blackbirds sitting on the mezquit bushes, so near the road that one might have struck them with a cane, and a herd of antelopes. The latter bounded before us, and were lost to view before our hunters could surround them. The ground beneath us seemed to afford habitations for various burrowing animals, judging from the numerous holes seen by the road side; but we had no time or means to discover what they were. I presume however that they were the habitations of ground rats and mice, coyotes, polecats, moles, rabbits, rattlesnakes, tarantulas, and other reptiles. As there are no rocky ledges, no thick bushes, or decayed logs or stumps in which these animals can burrow, they must resort to the earth; hence the vast number of holes which are seen in all such barren and desolate regions. Every animal here named I have myself seen, at various times, enter or make its exit from subterranean abodes. After some difficulty we found a spot near the river which afforded tolerable grazing for the animals, where we stopped, pitched our tents, and formed our corral. The banks of the river being high and precipitous, it was with difficulty that we watered our animals. One of the horses, in his eagerness to reach the stream, fell over the bank, and was extricated only by the great exertions of the party. A mule, which had exhibited symptoms of illness for several days, gave out to-day and was abandoned. It was a serious loss to us, for we had already lost four; and although the weight of our provisions was daily growing less, the weakness of the animals increased still faster, from their long journeys and insufficiency of food. The mercury stood at noon to-day at 82° Fahrenheit.

November 1st. Determined to make an early start this morning, for which purpose the camp was called at 4 o'clock. Got breakfast and were off at daylight. A little rain fell during the night. The wind was north; but the weather was warm, and our fears of a "norther," so much dreaded by all prairie travellers, subsided with the appearance of a bright sun.

Our march to-day has been through a region as barren and desolate as that of yesterday. Continued near the river, avoiding its windings. Noticed large spots covered with a saline efflorescence; in fact, on examination, the whole earth seemed impregnated with it. The water of the Pecos, which here is quite brackish, doubtless derives this flavor from the soil through which it passes. Patches of dry grass and stunted mezquit constitute the chief vegetation. Yuccas and cacti are thinly scattered over the plain: the former, sometimes appearing in groups, seemed like bodies of men; and many were ready to see an Indian in every resemblance to them which our journey afforded. Passed the carcasses of five oxen lying about the road; from which we concluded that they had belonged to some emigrant train, and had dropped down from exhaustion, and perished where they fell. Their lank bodies were dried up with the skins still adhering to them, showing that even wolves do not attempt to find a subsistence on this desolate plain. The remains of wagons were also seen along the road, and furnished our cook with fire-wood, an article which he had had much difficulty in procuring since leaving the Concho River, and particularly since we struck the region near the Pecos. Small brushwood and the roots of mezquit bushes had been our resort for fire-wood for several days. Perhaps it was well for us that we had no fine joints of meat or steaks to cook, with such fuel; but to fry a bit of pork, to boil some beans, and make coffee, which constituted our chief cooking, a little dry brush answered very well.

We had another windfall to-day in meeting with two oxen, which were pursued and taken. They proved rather lean; nevertheless they were an important addition to our stock of provisions. Took only their hind quarters, which would last as long as they could be preserved. Meat may be kept in this region by cutting it into strips and drying it in the sun; but we had not time to do this.

Stopped to water, and to our surprise found a beautiful fall in the river, eight or ten feet in height. It flowed between high banks of clay, resting on a base of conglomerate, over which it dashed with a life and beauty which contrasted pleasantly with its usual dark and treacherous flow. The banks near the fall are high and perpendicular, and expose many thin strata of various brightly colored deposits of sand and marl, presenting a singularly beautiful ribbon-like appearance. A small island or rock, overgrown with rushes, divided the fall. On tasting the water, it was found to be less brackish than at the Crossing. This fall is not noticed on the maps of the country. Passed a stray mule, which, looking plump and strong, I felt desirous to transfer to our wagons. Two or three men went in pursuit of him with lariats; but he outstripped them all, and disappeared in the chapporal. At four o'clock, stopped on the bank of the river, near a rapid, where we found the water accessible, and excellent grass for our animals.

Finding our stock of provisions was fast diminishing, I ordered an account taken of them. There proved to be but three hundred and sixty pounds of hard bread, or about ten pounds for each man, which was accordingly divided in this proportion among all. With the usual allowance of a pound a day for each, there was bread enough for ten days. As we could hardly expect to reach El Paso within that time, each man could govern himself accordingly, and save as much as possible for an emergency. But scanty as was our stock, it was unfit to be eaten, being completely riddled with *weevils.* Hundreds of these insects were found in a single biscuit. To remove them was out of the question; and there was no alternative but to shut the eyes and munch away. Of salt pork there was about a half allowance for ten days. The coffee and sugar was all gone.

November 2d. Our route kept on in a westerly course, near the river, which we occasionally distinguished on our right by the rushes and other plants peculiar to salt marshes, which grew upon its banks. The same barrenness continues, with scarcely a living object. A few blackbirds and sparrows are all that have been seen. Passed five more dried carcasses of oxen lying by the road. Fell in with a cow and yearling calf, and after a pretty good chase succeeded in lassoing the cow. She would not, however, consent to be driven with the train, when she was tied behind a wagon; but so furious did she become at being deprived of her liberty, that it was found necessary to shoot her. The calf was then followed a mile or more, and shared the same fate. Both proved very fat, and a most welcome addition to our supply of food in its diminished state. Passed several depressions near the river, which appeared to have been filled with water. A white efflorescence on their surface showed the extent of the saline matter with which the soil was impregnated. Crossed an *arroyo* or dry bed of a stream, covered with the salty incrustations before alluded to, which we took to be the "Toyah Creek" of the maps. At four o'clock, encamped on the margin of the Pecos, about two miles from the creek. The shrubbery to-day exhibits a larger growth than any we have seen since we crossed the river.

November 3d, Sunday. I was desirous to rest to-day; and had we been any where except on the banks of the Pecos, I certainly would have done so.

But a due regard for our safety rendered it necessary that we should not stop until beyond its waters and the miserable barren region near it. Should a rain set in, it would make the roads almost impassable for loaded wagons, so tenacious is the soil. The grass, too, but barely sustained life in our worn-out animals. We saw around us evidence of what the road would be in wet weather. Some teams seemed to have passed over it at such a time, leaving ruts six inches deep in the soft, muddy soil. Every day we noticed the clouds with fear and trembling, and watched each change in the weather. The roads are now hard and smooth, and have been so since we struck the river.

Our route has been over the same flat and desert plain before described. Not a living thing has crossed our path, beast, bird, or reptile, except two large white swans, which were doubtless winging their way to more attractive regions. They lit on a marshy place, which I endeavored to approach; but even in this out of the way spot, which the human foot seldom treads, they flew at my approach. Scattering patches of dried grass, with low chapporal, and an occasional yucca, constituted the vegetation of the twenty-two miles passed over to-day. In order to find a good spot for our encampment, two or three of the party diverged from the road, and succeeded in discovering a little nook on the river's bank, where there was good grass. Several hours before stopping, we got a glimpse of the Guadalupe Mountains, and a range of hills through which we must pass, although more than 100 miles off in a direct line, in a north-westerly direction. Mounts Diavolo and Carrizo, which had been visible to the westward, seventy or eighty miles distant, since crossing the Pecos, to-day were lost to our view.

Passed the carcasses of four cattle by the road side; and in another place, where there was a slight depression in the plain, and where water had at some time accumulated after rains, there lay the carcasses of five more, which had doubtless mired in endeavoring to satiate their thirst. Portions of wagons, boxes, and barrels were also noticed along the road.

November 4th. Still journeying along the river. Barren plains continue, with fewer mezquit than before. Dried grass and weeds prevail. Many carcasses and skeletons of oxen, and several skeletons of mules, marked our route to-day, as well as the remains of broken wagons. As the prairie did not furnish us fuel to make our fires, we gathered up the fragments of the wagons and carried them with us for the purpose. Noticed along the road recent tracks of Indians, horses, and mules; or, in the language of the country, "Indian sign." The tracks of the animals showed that they were unshod, which would not have been the case if it had been an American party. Next we observed prints of moccasins, which are easily distinguished from the American shoe, or from the sandal or moccasin of the Mexicans. Then the freshness of the foot-prints and of the dung, showed that the party could not have preceded us more than a few hours. In this belief we were strengthened by seeing large fires some fifteen or twenty miles off on the prairie, early in the evening.

Much sagacity is shown by experienced hunters and frontier men in detecting "signs" on the prairie, when and by whom made, the strength of the parties, their direction, etc., whether Indians, Mexicans, or Americans. So with the places where there have been encampments. These the wary traveller on the prairie inspects with care, to see whether friend or enemy has preceded him. If Indians, he will find poles from their wigwams, fragments of skins, scraps of leather ties, beads, etc.; and a little experience will enable him to distinguish the tribe, whether Comanches, Lipans, or Apaches. The principal characteristic, I believe, is the form of their wigwams. One sets up erect poles, another bends them over in a circular form, and the third gives them a low oval shape. There is also a difference in their moccasins, and the foot-prints they make. I know not the precise form of the Comanche and Lipan moccasins; but the Apaches assured me they could tell the foot-prints of the Comanches, the Mescaleros, the Yutas, the Coyoteros, or the Navahoes, and pointed out the distinctive marks of several. Different tribes of Indians have their peculiar fashions as well as civilised races, which are chiefly shown in their modes of dressing their hair and their coverings for the feet. American emigrants or travellers leave many marks to indicate their nationality and character, such as scraps of newspapers, bits of segars, fragments of hard bread, pieces of hempen rope, and other things. Mexicans would not be likely to have either of the articles named, but would be detected by the remains of cigarritos (small paper segars), pieces of raw hide, which they use instead of rope, etc. Or if they left any portion of their camp equipage, or cooking utensils, they would differ from those of Americans. The remains of their food, too, would differ. Tortillas, tamaules, frijoles, Chili colorado, and dried beef would appear; instead of hard bread, fried pork, beef-steak, etc.* If a Mexican wears a shoe, it will be very different in form from an American one.

The extent of a party is shown by the number of foot-prints. This cannot be told while it is in motion, as there may be a large number of animals driven in a herd with but few riders; but when the camp fires are examined, the number of persons can be detected with a considerable degree of certainty. The freshness of the foot-prints, the dung of the animals, and other signs show how recently a party may have passed; and there are other marks by which its rate of travelling can be ascertained.

Many are complaining to-day of illness, from indulging in fresh meat. It is hard to restrain travellers who have been living on salt pork, and but a scanty allowance of that, when a superabundance of fine fresh beef and veal is placed before them.

I have omitted to mention an incident that occurred, one of those which help to make up the chapter of events, and show the difficulties of our mode of travelling. Soon after we retired, there was a cry from the guard of "Turn out all hands, a mule in the river." The men all rushed from their tents, lanterns were lit, and ropes taken to rescue the animal; for we could not afford to lose another. It appeared that in grazing too near the bank, which was here some ten or fifteen feet above the river, and very precipitous, he had fallen over. Several men descended by the aid of ropes, and searched along the bank; but the poor creature could not be found, and it was supposed that he had been swept away by the current. When about to move this morning, a neighing was heard on the opposite side of the river, which proved to proceed from our lost mule. One of the men swam across with a rope, pursued and captured him and forced him over the steep bank, when he was drawn across the river. The bank was then levelled, and, by hard lifting and pulling, the animal was raised up and brought back in safety.

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* *Tortillas* are their cakes of corn, or wheaten flour. *Tamaules* are minced meat, rolled up in corn shucks, and baked on coals. *Frijoles*, dark Mexican beans. *Chili colorado*, red peppers.

Encamped at half-past three P. M. after travelling hours; our mules coming in greatly fatigued.

November 5th. Intended making an early start this morning; but when we came to hitch up the poor mules, they looked so lank and miserable, that we thought it best to turn them out again for a few hours to graze. Again we pursued our course along the river for a few miles, when we left it in the hope that we should not see it again; but we were doomed to disappointment, in coming plump upon it an hour after. We had now followed its dreary and monotonous banks for six days, and longed for a change of scene. Even the jornada of sixty-five miles presented novelties which the Pecos had not. The constant fear of being overtaken by a storm, the brackish water, and that always difficult to obtain, the miserable grass, and the deficiency of wood helped to render this portion of our journey most disagreeable; and but for the broken wagons that were providentially left in our way, we could not have procured wood enough to cook our food. The river and adjacent country here present the same aspect as below. In width it now varied from fifty to ninety feet, with steep banks of clay or sand from twelve to twenty feet in height. Its rapidity may be somewhat less than at the Horse-head Crossing.

On stopping to water our animals at the last halt made on the everlasting Pecos, one of our Mexican horses was suffered to nibble at the scanty grass on the river bank, while the party were taking a lunch. His dangerous situation was observed by one of the teamsters, who stepped forward to lead him away. Resisting the benevolent intention thus manifested towards him, the animal, as a matter of course, determined to progress backwards; and over the bank he went, nearly dragging the man after him. The bank was here full twenty feet high, one half being perpendicular, and the other, formed of the debris, nearly so. We all rushed to its edge, expecting to witness the last struggle of the poor beast, when, to our surprise, we saw him on his feet nearly covered with water. The comical look of the animal, as he rolled up his eyes at us, and the predicament he had placed himself in by his stubbornness, brought forth a hearty laugh from all. A man was let down by a rope, who succeeded in bringing him back to the camp none the worse for his fall and somerset.

Leaving the Pecos we took a direction a little north of west over a range of hills composed of gravel and marl. The road pursued a winding course among the hills and across deep ravines. At one place we stopped to look at some limestone sinks near the road. The earth and stone had caved in, or sunk, in spots varying from ten to thirty feet in diameter. The ground for some distance around appeared hollow and cavernous. The country since leaving the river was well covered with grass, but entirely destitute of trees or shrubs. At 4 o'clock reached Delaware or Sabine Creek, sixteen miles from the Pecos, and pitched our tents on a spot where there appeared to have been a very large encampment a few months before. Besides the fragments, there was one large Pennsylvania wagon nearly complete, numerous ox-yokes, boxes, barrels, etc., etc. These were collected and carried to our camp for firewood; and very acceptable they proved, for the banks of the creek did not furnish a bit of wood as large as one's finger. As the grass was abundant here and of the best description, with excellent water, I determined to halt to recruit the animals, and gave orders accordingly. The poor creatures were much in need of rest, for several had already given out and had to be removed from the wagons. Two colonies of prairie dogs were seen to-day after leaving the Pecos, the first we had noticed since leaving the great jornada beyond Castle Mountain.

November 6th. Was aroused in the night by the whistling of the wind. Feeling a great change in the temperature, I looked out of my carriage window, and to my surprise found the ground covered with snow. There was no sleep after this; and as soon as morning dawned, I got up to inspect the condition of the party and the animals, and to see what could be done for their comfort. The dreaded Norther I had so much feared when near the Pecos, had now come upon us with all its fury and in its very worst shape, accompanied with snow. But bad as our condition was, it might have been worse. We had escaped the inhospitable region of the Pecos, where the water was unfit to drink, scarcely any grazing was to be had for our animals, and no wood wherewith to cook our food. Here the grass was excellent and abundant, the water was pure, and the calamities of others furnished us with broken wagons and other articles for fire-wood. But our poor animals had no shelter from the pitiless storm, there being not a tree to break the force of the keen blast which seemed to pierce them to the quick. A few isolated bushes grew near the camp, but nothing that afforded a covering. During the day, many wandered off, probably to seek a shelter; and at one time, ten men were gone in pursuit of them. Some of the horses had strayed seven miles before they were taken.

The only means to add to our comfort were to bank the earth around the tents to keep out the snow and the cold blasts; to bring our overcoats and India-rubber garments into requisition; and to keep up as large fires as the broken wagons and boxes would admit of.

Finding it very hard to keep warm even by the fire, with the cold wind and snow beating on my back, I laid aside my heavy blanket, put on my India-rubber cloak and long boots, and took my double-barrelled gun to see what virtue there was in a little sport by way of exercise. The result proved to be better than remaining still, roasting and freezing alternately by the fire. The excitement and exercise restored the circulation, and the satisfaction of procuring several brace of ducks amply repaid the hardship of facing the storm. Removing my India-rubbers I again wrapped my blanket around me, seated myself in my carriage with Dr. Webb, and there spent the remainder of the long day in reading Erman's Travels in Siberia, a proper book for the occasion. The young men took it very calmly, spending the time at the camp fires or in their tents. So passed the day.

November 7th. In camp, on Delaware Creek. Passed a cold and sleepless night. The sharp wind found its way through the openings in the carriage, which all the blankets I could pile on would not keep out. The young gentlemen crowded themselves in their tents, and lay as close as possible; while the teamsters, laborers, etc., stowed themselves in the wagons. The morning was sharp and cold; the snow continued to fall, and the wind remained at the north, though blowing less than the previous day.

I was desirous to resume our march; but the teamsters and others, whose experience among mules was greater than mine, thought it impracticable. To do so they said would result in our discomfort and perhaps ruin: for the animals would assuredly give out and leave us much worse off than we were at present. I yielded to their representations and determined to remain a while longer: for we were in a good encampment with grass and water at hand, and the flooring of our tents was dry—a consideration of great importance. No one had taken cold or shown symptoms of illness. Before leaving San Antonio my friends told me that at this season of the year we could

CAMP IN SNOW STORM ON DELAWARE CREEK TEXAS

hardly expect to escape the Northers, and advised me if overtaken by one not to move, but encamp at once, and keep quiet until it had passed. But in determining to remain I thought it most prudent to send a small party in advance to El Paso, now about one hundred and sixty-five miles off, for assistance.

I ordered another inventory to be made of our provisions, and found nothing remaining but a limited supply of hard bread and pork; every thing else was gone. If we kept on, we might reach El Paso by parching the few remaining bushels of corn and taking an occasional *mule steak;* but if compelled to remain here two or three days we should be reduced to a very short allowance. Messrs. Thurber, Moss, and Weems at once volunteered their services to go to El Paso. No time was lost therefore in fitting them out. They selected three of the hardiest riding animals; put up four days' provisions, which they put in bags and hung to their saddles; fastened their blankets behind them; and set off in the midst of the storm, two hours after it was determined to send them. One of the teamsters named Pratt, a very useful and energetic man, accompanied them. I gave them the following letter to Major Van Horne, commanding at El Paso:

"MEXICAN BOUNDARY COMMISSION IN CAMP,
"Delaware Creek, Nov. 7, 1850.

"SIR: I reached this place on the afternoon of the 5th instant with a portion of the United States Boundary Commission, having left the main body at San Antonio to follow immediately. My desire being to reach El

Paso as early as possible after the first of November, we took provisions but for thirty days.

"I now find myself overtaken by a Norther and severe snow-storm; my animals are much reduced by fatigue, and there is a probability that I shall fall short of provisions, in case the storm should continue. Under these circumstances I have deemed it prudent for the safety of my party to send four of them to El Paso, to procure aid to enable me to reach there as soon as possible. In the meantime I shall advance as soon as the weather will permit, and hope to reach the Guadalupe Pass in season to meet the return messenger.

"I shall be glad if you can send to my aid the following, viz.: ten mules, to be returned in good condition; and bread, pork, sugar, and coffee sufficient for my party for five days: for which I will pay you on my arrival.

"I am, very respectfully,
"Your obedient servant,
"JOHN R. BARTLETT,
Commissioner.

"To Major J. Van Horne,
Commanding,
El Paso del Norte, Texas."

CHAPTER VI.

DELAWARE CREEK TO EL PASO.

Difficulty of proceeding—Set out with a small party in advance—View of Guadalupe Mountain—Boiling Spring—Deceptive clearness of the atmosphere—Guadalupe Pass—Descent to the plain—Meet Mr. Coon's train—Hospitality—Mr. Thurber's note—Take leave of the train—Cornudos del Alamo—Thorne's Well—Ojos del Alamo—Waco Mountain Pass—Waco Tanks—Meet Messrs. Thurber and Weems on their return—Arrival at El Paso—Itinerary of route—Remarks on the country traversed—Its adaptability to a public road.

November 8*th.* Camp on Delaware Creek. With great delight I rose from my carriage bed this morning at the first peep of day, to find the weather had moderated. Soon after the sun beamed forth in all his splendor, and with it the hope that we should be able to resume our journey. After a few hours delay in packing the tents, arranging our camp equipage, and drying the collars of the mules, the pleasing sound was heard from the teamsters of "All ready!" when we left camp, and, immediately crossing the creek, emerged on the more elevated bank beyond. The dry earth and the warm sun soon absorbed or evaporated the snow, so that our progress was but little impeded. But we had not proceeded many miles before the mules showed symptoms of fatigue and suffering from the effects of the cold. Several gave out entirely, hung their heads, and sank to the ground, or refused to move further. These were necessarily removed from the teams, so that several of the wagons were reduced to two feeble mules. As my carriage mules were in better condition, I had got some distance in advance, when word was brought me that the animals were giving out so fast that it would be necessary for us to encamp at the first place where good grass and water could be found. A few miles further brought us again to Delaware Creek, where, finding good grass as well as fuel, we stopped and encamped. Dr. Webb and myself walked the entire distance to-day. An examination of the mules soon showed that in their present condition our progress must be very slow, not exceeding twelve or fifteen miles a day; and that it would be absolutely necessary to give them a couple of days' rest where there was good grazing. This delay would destroy all my plans of reaching my place of destination within the period required, and exhaust our provisions before the supply sent for could arrive. I determined, therefore, as my carriage mules were in good order, to push on myself. With this view I made up a party consisting of Dr. Webb, Messrs. Murphy, Cremony, Matthews, Young, and Thompson; these, with my carriage driver and another, made eight persons, a party I believed sufficiently strong to go through in safety. We selected good animals, and made such preparations as were necessary during the afternoon and evening, to insure an early start in the morning. A sack of our remaining corn was lashed to the axle-tree of my carriage for the mules. Some salt pork was cooked, which, with hard bread, was stowed inside, while the unoccupied space inside and out was filled with bedding. A tent could not be taken, as the carriage was already too heavily burdened.

November 9th. Up at four o'clock; took a hearty breakfast, and was ready to move as soon as there was sufficient light to see the road. Started at a lively pace, intending to make a good march. The road was quite tortuous, winding among and over hills, in a direction nearly west, towards the bold head of the great Guadalupe Mountain, which had been before us some eight or ten days. This is a most remarkable landmark, rising as it does far above all other objects, and terminating abruptly about three thousand feet above the surrounding plain. The *sierra* or mountain range which ends with it, comes from the north-east. It is a dark, gloomy-looking range, with bold and forbidding sides, consisting of huge piles of rocks, their *debris* heaped far above the surrounding hills. As it approaches its termination the color changes to a pure white, tinted with buff or light orange, presenting a beautiful contrast with other portions of the range, or with the azure blue of the sky beyond; for in this elevated region the heavens have a remarkable brilliancy and depth of color.

The low hills we passed are woodless, and sparsely covered with grass. Limestone occasionally protrudes from the hills, while the soil is hard and gravelly, with an occasional patch of sand. Stopped to water the animals at the head waters of Delaware Creek, probably Walnut Creek, about fifteen miles from camp, when we continued our course towards the head of the Guadalupe Mountain, reaching a boiling spring about five o'clock. There are here three fine springs, one of which tasted strongly of sulphur; the second seemed impregnated with salts of soda, while the third was very pure. Found good grazing in the valley where we stopped, with a little grove of trees, a pretty place to have spent a day in, had circumstances rendered it proper; but while our animals were in a condition to move, I determined to press them to their utmost. Estimated distance travelled to-day, thirty-five miles.

The Guadalupe had been before us the whole day, and we all expected to reach it within a couple of hours after leaving camp. But hour after hour we drove directly towards it, without seeming to approach nearer; and finally, after journeying ten hours, the mountain seemed to be as distant as it was in the morning. Such is the great clearness of the atmosphere here, that one unused to measuring distances in elevated regions is greatly deceived in his calculations. When this mountain was first discovered we were more than one hundred miles off. Even then its features stood out boldly against the blue sky; and when the rays of the morning sun were shed upon it, it exhibited every outline of its rugged sides with as much distinctness as a similar object would in the old States at one fifth the distance. Often have I gazed at the Katskill Mountains in sailing down the Hudson; and though at a distance of but twelve miles, I never saw them as distinctly, as the Guadalupe Mountain appeared sixty miles off.

For several miles before reaching the springs we

GUADALUPE MOUNTAIN, TEXAS.—p. 118. vol. i.

had in vain tried to pick up wood enough to make a fire; but none could be found, not even roots or brushwood. Still the good fortune which had attended us in our journey did not desert us here. A disabled wagon, with its large box, lay near the springs. This not only furnished us with fuel for a fire, but the box, which was whole, served as a sleeping-place for four of the party. This was placed on one side of the fire, and the carriage drawn up on the other. As we were near one of the notorious lurking-places of the Apaches, a strict guard was kept up, and relieved every hour during the night.

November 10*th.* Two hours before day my carriage driver was out with the mules to give them an early feed, while we managed to make a pot of tea from a canister, which I always carried with me for such occasions. This, with cold pork and hard bread, made our breakfast; but meagre as it was, it was taken with a relish. We then filled our leather water tank, and were on our journey before the sun peeped over the adjacent hills to our left. No sunrise at sea or from the mountain's summit could equal in grandeur that which we now beheld, when the first rays struck the snow-clad mountain, which reared its lofty head before us. The projecting cliffs of white and orange stood out in bold relief against the azure sky, while the crevices and gorges, filled with snow, showed their inequalities with a wonderful distinctness. At the same time the beams of the sun playing on the snow produced the most brilliant and ever-changing iris hues. No painter's art could reproduce, or colors imitate, these gorgeous prismatic tints.

Five or six miles, over a hilly though very hard road, brought us to the base of the mountain, where we noticed a grove of live-oaks and pines, with water near them; but as it was too early to water our animals, we did not stop. At this spring a train was attacked a few months before we passed, and four men killed. As we now began to descend, I got out of the carriage, preferring to go on foot. I could thus the more readily lock and unlock the wheels when necessary. The road here, after passing through long defiles, winds for some distance along the side of the mountain. Now it plunges down some deep abyss, and then it suddenly rises again upon some little castellated spur, so that one almost imagines himself to be in a veritable fortress. Again we pass along the brink of a deep gorge, whose bottom, filled with trees, is concealed from our view, while the evergreen cedar juts forth here and there from the chasms in its sides. Winding and turning in every direction, we followed the intricacies of the Guadalupe Pass for at least six hours; and whenever the prospect opened before us, there stood the majestic bluff in all its grandeur, solitary and alone. In one place the road runs along the mountain on a bare rocky shelf not wide enough for two wagons to pass, and the next moment passes down through an immense gorge, walled by mountains of limestone, regularly terraced. As we were descending from this narrow ledge, the iron bolt which held the tongue of the carriage broke and let it drop. Nothing but iron would do to repair the injury; and after trying various expedients, a substitute for the broken bolt was found in the bail or handle of the tin kettle which held our provisions. This, being doubled and driven through the hole previously filled by the bolt, kept it in its place, while the tongue was supported by cords. By careful driving, and relieving the weight of the carriage by alighting when going over bad places, we got along tolerably well.

I regretted that we were not able to spend more time in this interesting Pass, the grandeur of which would, under any other circumstances, have induced us to linger; but we had too much at stake to waste a single hour. Many new forms of cacti were seen here; and upon emerging from it, we observed in quantities the *fouquiera* (I know no other name for it) covering the gravel knolls. This singular shrub throws up from just above the surface of the ground numerous simple stems, eight or ten feet high, armed with sharp hooked thorns.

On reaching the summit of the line of hills, which completely surround the Guadalupe range on the western side, we looked down upon a broad plain, stretching out as far as the eye could reach. The Sacramento Mountains, which are but the continuation of the Guadalupe range, extend from east to west for a distance of more than a hundred miles, terminating, like the latter, in a bold bluff, when another range seems to intersect them from the north. Far to the north-west we could see the *Cornudos del Alamo* like two great mounds rising from a vast plain, while to the south-west the horizon was bounded by a faint blue outline of mountains, with jagged tops. The plain appeared level from the height at which we viewed it, and was interspersed with what looked like silvery and tranquil lakes, glittering in the sun, seeming, as it were, to tempt the weary traveller to their brink. Our young men cried out "Water!" delighted with the idea of again enjoying this luxury after a long day's ride. But the whole turned out a delusion; what appeared to be the glassy surface of a lake or pond, being nothing but the saline incrustations of a dried up lake. The vast plain, or desert, as it may with more propriety be called, as far as the eye could reach, was dotted with these saline depressions.

Before we had got through this pass we came upon another broken wagon, and among its iron work were so fortunate as to find a bolt precisely the size of the one we had broken. The wire was quickly knocked out, and the bolt inserted in its place; after which the driver put on his whip, and we rolled over the hard and excellent road at a rapid pace.

The summit of the mountain appears to be covered with heavy pine timber; but its rocky sides exhibit no foliage, except in the deep chasms which run from it in every direction. At its base, too, we noticed large trees of pine, oak, cedar, etc.

We had now ridden the entire day without water for our animals, not discovering a spring which is noted on the map as *Ojo del Cuerpo*, and at which I had proposed stopping. Our leather tank was empty, and I began to feel anxious on our own account, as the next water laid down on the map is at the *Cornudos del Alamo*, thirty miles distant. The road was now pretty good, and we went over it on a fast trot. On the left we passed a range of hills of pure white sand, the same we saw when the plain first opened to us, and which we supposed to be water, and a few miles further the dry bed of a lake, with a white surface, appearing also like water. It was quite rough and hilly here. Clumps of bushes grew in the intervening valleys, which I sent parties to examine, in the hope of finding water, but without success.

While pondering whether to push on or encamp where we were, without water, we discovered far off in the plain, directly before us, what appeared to be a large encampment. Smoke was curling up from many fires; and we descried a long line of white objects. Took my spy-glass, and discovered the white dots to be so many wagons stretching over the plain; all which assured us we had nothing to fear. The pleasant prospect of again meeting with our countrymen quite raised our drooping spirits. The weary animals, who doubtless smelt the water, as mules always do, from a great distance, seemed to rouse themselves to new exertions. A rapid drive of four miles brought us to the encampment, which proved to be a train of about sixty large wagons, with government stores, bound for El Paso. It belonged to Mr. Coons, and left Indianola, on the coast, in April, and San Antonio in June last. After sustaining extensive losses of wagons and animals, they arrived here fifty-six days before us, and were forced to remain, as there was not water between this place and El Paso for so large a number of animals as they had with them. The distance was said to be about one hundred miles. Their wagons were mostly drawn by oxen, which could not travel more than fifteen miles a day, and would therefore require six days to reach their place of destination. The train here was in charge of Mr. Percy, who, after waiting several weeks in the hope that there would be rain, had sent a messenger to the commanding officer at El Paso, informing him of his situation, and requesting assistance. Parties were now on their way from the Rio Grande, bringing water in barrels, which were to be deposited at several points for the use of the animals, to enable them to complete their journey.

On approaching the encampment we were surrounded by sixty or seventy teamsters, who, ragged, dirty, and unshaven, crowded around us; for, with the exception of Mr. Thurber and his party, who had stopped here the day before, they had seen no one from the "States" since their departure from San Antonio in June. They had had a long and painful journey to this place, and suffered much for the want of water. Their animals had given out in many places, which had caused hundreds to be left behind; and many of their wagons had been disabled or rendered useless for want of means to draw them. Besides draught animals, a large herd, embracing several hundred beef cattle, had been driven with the train; and among these there had been great mortality. The stray cattle we had seen, and a few of which we had secured, were doubtless some which had luckily been left near a spot where there was grass and water, which enabled them to recover their strength.

Mr. Percy, the gentleman in charge of the wagons, gave us a warm reception, and kindly offered to let me have the provisions I was so desirous to procure for the relief of the party I had left behind, on my giving a receipt for them to the U. S. Quarter-master on my arrival at El Paso. Having eaten nothing since daylight, we feasted with great relish on our cold pork and biscuit. Our generous host ordered supper for us, but we were too hungry to wait; though I believe most of the party accepted his invitation, and did full justice to a second meal before retiring to their blankets. Mr. Percy, who had the only tent in his party, gave places to as many as could stow themselves within it. Estimated the distance travelled to-day to be thirty-eight miles.

November 11*th*. In camp at Salt Lake, near Guadalupe Mountains. The lake, or rather pond, near which we are encamped, is a small body of water covering three or four acres, surrounded on all sides by an open prairie or plain, in which there are scattering bushes, with patches of pretty good grass: no trees are to be seen, nearer than the base of the mountain. The pond is resorted to by wild ducks, plover, and other water-fowl, in great numbers; but the continued proximity of so large a body of men as Mr. Percy's party, has made them less plentiful and quite shy. Still I managed to shoot a few before breakfast.

The following note left here by Mr. Thurber, gives the particulars of his journey. It was intended to be sent to the spring at the Guadalupe Pass.

Coon's Camp, near Salt Lake,
November 9, 1850.

"Sir: After leaving you at the camp on Delaware Creek, we made the best progress the storm would permit. The snow balled in the feet of our animals so badly, that we were forced to halt about 11 o'clock at night. We bivouacked in the snow without fire. On the morning of yesterday, we were obliged to melt snow in order to obtain water for our breakfast. We found the road through the mountain, particularly in the gorges, much obstructed by snow of such an adhesive nature, that our animals could work their way but slowly, although without their riders. We found but little snow in the most difficult portions of the pass. Pratt's horse became so completely disabled, that we had great difficulty in urging him along, and have been much delayed on his account. We did not succeed in finding the "Ojo del Cuerpo," which, according to Ford and Neighbors, "breaks up in the plain;" but we were obliged to encamp without water for our animals, and with but a gill for each of ourselves. This morning we started very early, and soon came in sight of an encampment, which, on reaching it, we found to be Coon's train, which left San Antonio on the 10th June, with government supplies for El Paso. This is the train whose stray cattle and broken wagons have so frequently furnished us with food and fuel, since crossing the Pecos. We were received with great hospitality by Mr. Percy, who is in command in the absence of Mr. Coon.

"I would suggest the propriety of stopping at the spring, at the base of the mountain, where there is good grazing, and to recruit the animals before attempting the pass. I fear we shall be obliged to leave Mr. Pratt here, as his horse is utterly unable to go on.

"A party of men are going back as far as the spring alluded to above, to herd oxen. I shall send this letter and a small supply of sugar and coffee by them. Mr. Scallen, the bearer of this, will direct you to watering places this side of the pass, which we missed, not knowing where to find them. It will be necessary to fill up the water kegs here. The water, though smelling strongly of sulphuretted hydrogen, is not unpalatable. All kinds of provisions are very high and scarce in El Paso. Flour is $92 a barrel; coffee, sugar, and pork, 50 cents per pound. We are all in good spirits, and move from here at noon.

"Very truly, your obedient servant,
"GEORGE THURBER.

"JOHN R. BARTLETT, Esq.
Commissioner."

After partaking of a hearty breakfast, provided for us by Mr. Percy, we made preparations to start, determined to press through, believing that we should find water enough for our small party at the three springs, or watering places, between us and the Rio Grande, which was yet about one hundred and eight miles off. But we had expectations from another source: as Mr. Daguerre, who had just arrived from El Paso, informed me that his wagons were on the way to the camp bringing water for Mr. Coon's train, which they were depositing at certain points on the road; and he most generously gave me permission to use it, if we found none at the watering places, and should require it for ourselves or for our animals.

While making our preparations to start, Mr. Percy filled our kettle with some excellent boiled beef, bread, coffee, and sugar,—an acceptable addition to our stock of pork and hard bread, which, though very good, was not sufficient to carry us to our journey's end. In fact, but for this assistance, we must have come on short allowance at once.

After putting up a barrel of pork, with a quantity of bread, sugar, coffee, etc., which our host undertook to send back immediately to the spring at the foot of the mountain, for the party we had left behind, we took leave of our good friends, and dashed off in fine spirits for Thorne's Wells, in the mountain, called the "Cornudos del Alamo," or Horns of the Alamo, thirty-three miles distant, which I hoped to reach before dark. The road was most monotonous for the first twenty miles; the great abundance of yuccas and cacti giving a strange and striking air to the vegetation. We saw splendid specimens of a large tree-like cactus (*Opuntia arborescens*). This is a much branched species, with clusters of yellow fruit at the ends of its long, horrible, spiny arms. Specimens were seen from six to ten feet high, and twenty to thirty feet in circumference. The country is slightly undulating, and not a level plain, as it appeared to be from the hills. The soil seemed barren, and in many places was covered with saline incrustations. Several dog-towns were passed. At noon, saw a great cloud of dust rising from the plain immediately ahead of us; which, as we drew near, was found to proceed from ten large wagons of ten mules each, belonging to Mr. Daguerre, on their way from El Paso, to relieve the train we had just left. At 6 o'clock, reached the *Cornudos del Alamo*, towards which we had been journeying since our start this morning; and being unable at this late hour, it being now dark, to find the wells in the clefts of the rocks, we encamped without water. This wonderful mountain, of which it is impossible to convey any adequate idea by description, is a pile of red granite boulders of gigantic size, thrown up abruptly into the plain. The boulders are mostly of an oblong shape, with their largest diameter vertical; they are rounded and often highly polished. The interstices between the rocks form in many places extensive caverns. On the summit I noticed two projecting piles, or masses, which rose many feet above the level of the other portions in a conical form, resembling horns, whence I suppose originated the name "Horns of the Alamo"—the mountain itself being known as the Alamo. After building a fire near a rock (for wood was abundant around us), four of the party took a lantern and scrambled about among the rocks in search of water. It seemed a bold and hopeless undertaking for tiny man, guided by the dim light of a candle, to be probing the deep recesses of the mountain, and clambering over these gigantic boulders, which were piled up to the height of four or five hundred feet. But, when urged by his necessities, it is hard to say what he cannot accomplish. Within an hour, one of the party was so fortunate as to find in a cavity of a rock water enough to fill our tea-kettle, which had collected from the melting of the snow a few days before. After a cup of warm tea and a hearty supper, the carriage was drawn near the fire, when all bivouacked around it, and were soon lost in sleep.

November 12*th*. Being spared the trouble of boiling coffee, for want of water to make it withal, we did not wait for breakfast, but set off before daylight. Before quitting the mountain, we journeyed along it for some distance, close to its base. We thus found a singular gorge, or glen, which led some fifty feet into the mountain, where it opened to the sky. Within this inner cavern-like place was a deep hole, which appeared to have contained water, and which we supposed to be the "Thorne's Well" of which we had been in search; but at this time, it was perfectly dry. Some large trees had sprung up in this singular place, and the rocky walls were highly polished, as if by the hand of man. There were other deep holes near the entrance, which we supposed had been dug by California emigrants in search for water. All around were indications that it had been a camping place for many parties. Near the entrance alluded to, were several carcasses of oxen, which had perished here before the well was dug.

Resuming our journey we rode ten miles to the Ojos del Alamo, or Cotton-wood Springs, on a hard and excellent road. Our landmark for this spring was a single cotton-wood tree, about five hundred feet up the side of a mountain, on our left. As the mountain was otherwise bare of foliage, save a few shrubs, the tree was easily seen, though from below it looked more like a bush; still its light yellowish green distinguished it perfectly from every thing around. Left the carriage at the base of the mountain, and clambered up to the springs, of which there are seven. The water was very good, though but little remained. Upon the faces of the rocks near were rude sculptures and paintings, made by the Indians. We led some of the animals up to the springs; and others, that would not make the ascent, were watered from the kegs which our friends had deposited at the base. Found a note from Mr. Thurber here, stating that his party had preceded us two days.

Turned our animals out to graze, as the grass was very good, and took breakfast. The Hueco, or Waco Mountains, our next landmark, lay before us here at twenty-five miles distance, and for them we now set out; but so clear was the atmosphere that they did not appear more than eight or nine miles off. The road, which led over a rolling prairie, was excellent. Not a tree was seen, and scarcely a bush the entire distance. The grass was poor and thin. At 2 o'clock reached the mountain, and at once entered the pass. Just before reaching it, the road divides, one branch leading to the right, the other to the left of the mountain. I was advised to take the latter, which was five miles shorter than the other, as my carriage could be easily lifted over a very steep place in the defile, which was impracticable for loaded wagons. The latter invariably take the longer route. The descent was gradual and easy, and led through a narrow defile along the base of the mountain, which lay close on our right. The road was very tortuous, with small hills and deep ravines to cross, though unattended with difficulties, until, after a long descent, we were obliged to follow an *arroyo*, or stony bed of a water-course. Here the way was exceedingly rough, so that I feared every moment to see the carriage upset or broken in pieces. We were finally brought to a stand, where the road or path, if entitled to either appellation, led precipitately over a ledge of rocks some ten or twelve feet. How any wheeled vehicle ever got through here it was difficult to imagine. After an examination of the place, it was thought most prudent to take out the mules, which were led around the side of the defile, or through a chasm in the rock. We then took two ropes, and attached them to the hind axletree of the carriage. Wells, the driver, a stout and athletic man, took the tongue and guided the carriage over the precipice, while we let it carefully down by the ropes. In this way it was got over in safety, and deposited on the gravelly bed of the defile. The mules were now hitched up again, and we continued our journey along the same sort of road for about a mile. This was an exceedingly grand and picturesque spot, differing from any thing we had seen on our route. On both sides the gray limestone

Waco Mountain Pass.

rocks rose perpendicular like walls. From the top and in the crevices of these, grew a variety of shrubs. A low range of rounded gravelly hills, covered with grass, but destitute of trees, bordered the defile; while about half a mile or less beyond, loomed up the great mountain, its almost perpendicular sides showing a dark brown granite from the base to its very summit. So steep is the mountain that it cannot be ascended except from the plain above. As we emerged from the narrow gorge, the same terraced and castellated rocks which we noticed at Castle Mountain appeared again, but in more strange and picturesque forms—now a fortification, and again some ruined town. These terraced hills opened into a plain or amphitheatre about three miles across, surrounded by hills and mountains, except on the north. Passing them, we reached the Hueco Tanks, and stopped beneath a huge overhanging rock.

The mountains in which these so-called "Tanks" are found, are two rocky piles of a similar character to the Cornudos del Alamo before described. The rocks, however, are thrown together in still wilder confusion, and are of more irregular forms. One mass extends about a mile along the amphitheatre above mentioned, and is about half a mile in breadth. The other, situated to the south, is separated by a narrow pass from that described. It, too, extends about a mile from north to south; but in other respects is very irregular, consisting of several vast heaps, quite disconnected. Much of this is granite in place, while gigantic boulders are piled up like pebble stones at its sides and on its summit. These piles are from one hundred to one hundred and fifty feet in height.

After a little search we found water in a great cavity or natural tank in the rock about twenty feet above our heads, containing about fifty barrels, pure and sweet. This tank was covered by a huge boulder, weighing some hundred tons, the lower surface of which was but four or five feet above the water. Searching along the base of the mountain we found another cavity, where we watered our animals. There remained yet another hour before dark; and as there was no grass near, I thought best to push on a few miles and stop wherever grass should be found.

The road leads between the great rocky masses described above, when it enters a plain beyond. We had scarcely passed the mountain when we met Messrs. Thurber and Weems, who were returning from El Paso, with ten mules and two men for the assistance of our train, which had been promptly furnished by Major Van Horne. We bivouacked together, after learning that we should find no grass further on. It was poor here, and only grew in tufts about the roots of the mezquit chapporal; but with the hope of terminating our journey on the morrow, we could rest easy. A supper was cooked with the brushwood of the mezquit; and the evening was spent in asking a thousand questions of our friends about what they had seen, and how civilized people again appeared to them.

November 13*th*. Breakfasted and resumed our journey before daylight, having twenty-five miles to make before its close. About three miles from the Hueco Tanks we passed a range of hills, when a broad plain opened upon us in every direction. Here we first got a glimpse of Mexico, in a range of mountains which rises ten miles in the rear of El Paso. North-east of them were the El Paso Mountains, on the eastern bank of the river, which unite with the Organ Mountains or "Sierra de los Organos," whose pinnacles and jagged summits could be distinctly seen about sixty miles to the north-west. To the north, at a great distance, Mount Soledad was dimly seen; while at the south the long line of horizon was only broken by low hills, on the Mexican side of the river. A road branched off just beyond the low hills we had passed, leading to the town of Isleta, in a southerly direction. Our course now lay south-west, over a sandy and desert plain, covered with low mezquit chapporal. Grama grass grew in tufts or little patches here and there; which, though dry and apparently without sustenance, is eagerly eaten by mules. The country was exceedingly monotonous; and our tired animals could scarcely drag their loads through the deep sand, which continued the whole way without interruption. We kept rising gradually over the undulating table land which borders the Rio Grande, until at length we reached its highest level. Here the valley of that long looked-for river opened upon us. A line of foliage of the richest green with occasional patches of bright yellow and brown marked its course. The first autumnal tinge, which in our northern forests so beautifully indicates the earliest frost and reminds us of the coming winter, is here likewise apparent. But there is not that diversity of hue as with us,—no rich crimson, scarlet and purple; which is easily accounted for by the want of variety in the Mexican forest. Here the cotton-wood alone is found. Soon the houses were seen peeping from among the trees; but when the "stars and stripes" were discovered curling in the breeze, a thrill ran through our veins which must be felt by those situated as we were to be understood. I had often read of the delight with which mariners, after a long absence, greet the sight of their national flag in some distant port; and this delight I now experienced. It seemed like a glimpse of home, and reminded us that we were approaching not only civilization, but countrymen and friends. We now descended from the plateau to the valley of the Rio Grande, after which a ride of half an hour brought us to the military post at El Paso del Norte. Here we were kindly received by the Commandant, Major Van Horne, who assigned such quarters for us all as the place afforded.

Our journey from San Antonio had taken us thirty-three days, six of which we were detained on the way, making twenty-seven travelling days in all. I make my estimates from our rate of travelling, and from the distances on the map of Ford and Neighbors; but adopt the measurements made by Major Bryan with a viameter. Some of his first camps differed from mine, though our trails could not have been far apart between Fredericksburg and the head of the Concho River, where we both struck the Emigrant Road, which we followed to the Rio Grande.

		Miles.
From San Antonio to	Fredericksburg	69·67
"	Banon Creek	8·22
"	Theudgill's Creek	15·14
"	Llano River	15·28
"	Comanche Creek	8·65
"	Head of Honey Creek	9·54

		Miles.
From San Antonio to	San Saba River	11·11
"	Head of Camp Creek	4·85
"	South Branch of Brady's Creek	14·27
"	Brady's Creek	15·18
"	Head of Brady's Creek	7·50
"	Kickapoo Creek	13·73
"	Lipan Creek	11·60
"	Antelope Creek	11·20
"	South Concho	4·12
"	Dove Creek	9·02
"	Good Spring Creek	3·43
"	Lipan Camp Creek	5·35
"	Green Mounds	5·70
"	Concho River	7·02
"	Crossing of Concho	11·66
"	Head Springs of Concho	18·03
"	Castle Mountain	55·28
"	River Pecos	13·00
"	Falls of the Pecos	32·39
"	Delaware Creek	94·78
"	Independence Spring (three springs)	40·03
"	Spring at foot of Guadalupe Mountain	5·54
"	Spring Ojo del Cuerpo	28·21
"	Cornudos del Alamo	28·15
"	Ojos del Alamo	9·14
"	Waco Mountains	19·05
"	Waco Tanks	6·42
"	Rio Grande at El Paso (say)	28·00

The distance by Major Bryan's table from San Antonio to Isleta on the Rio Grande is 638·02 miles. It is called 28 miles from the Waco Tanks to El Paso, which would make the distance from San Antonio to that place 635 miles. The distance by the southern route, followed by the main body of the Commission, is 673 miles.

A few general remarks on the country we have passed over seem proper here. From Indianola to San Antonio there is an excellent road, with wood, water, and grass in abundance, except between Indianola and Victoria, where there is but little wood. Parties should therefore provide themselves with fuel before starting. The soil here is admirably adapted to agriculture. From San Antonio to Fredericksburg, the road is very stony a portion of the way, the remainder good. The soil is excellent. Wood, water, and grass are always found at convenient distances, and in abundance. The soil continues of a good quality until the San Saba is reached; from that river to the north fork of Brady's Creek it is not so good. The grass is generally light to the latter place, with less wood and water, though enough for parties travelling. We now begin to get on the great table-land of Texas, where there is little rain and a poor soil. Several small streams emptying into the Colorado or the Concho here intersect the road, on the immediate banks of which there are a few trees. But the intermediate country is destitute of timber, save a very few small oaks or mezquit. The grass too is poor, except near the water courses. On leaving the head waters of the Concho, nature assumes a new aspect. Here trees and shrubs disappear, except the thorny chapporal of the deserts; the water courses all cease, nor does any stream intervene until the Rio Grande is reached, 350 miles distant, except the muddy Pecos, which, rising in the Rocky Mountains near Santa Fé, crosses the great desert plain west of the Llano Estacado, or Staked Plain. From the Rio Grande to the waters of the Pacific, pursuing a westerly course along the 32d parallel, near El Paso del Norte, there is no stream of a higher grade than a small creek. I know of none but the San Pedro and the Santa Cruz, the latter but a rivulet losing itself in the sands near the Gila, the other but a diminutive stream scarcely reaching that river. At the head waters of the Concho, therefore, begins that great desert region, which, with no interruption save a limited valley or bottom land along the Rio Grande, and lesser ones near the small courses mentioned, extends over a district embracing sixteen degrees of longitude, or about a thousand miles, and is wholly unfit for agriculture. It is a desolate barren waste, which can never be rendered useful for man or beast, save for a public highway. It is destitute of forests, except in the defiles and gorges of the higher mountains or on their summits. Along the valley of the Rio Grande, which is from one and a half to two miles in width, there grow large cotton wood trees and a few mezquit; but between this river and the north fork of Brady's Creek there is no timbered land.

The country is well adapted for a wagon road, and equally so for a railway, as all desert regions are, unless they are sandy. From Fredericksburg, all the way to the Rio Grande, there is a natural road, which as a whole is better than half the roads in the United States west of the Mississippi. Very little has been done to this road of nearly 600 miles to render it what it is; and a little labor where the streams are crossed, with a bridge across the Pecos, which could be constructed with great ease and at a small expense, would make the whole of it equal to our best turnpikes. Here and there I would recommend a slight change in its direction; as for instance, near Kickapoo Creek, to avoid a rocky ridge; and some improvements might be made near Fredericksburg: but these are trifles. The most important consideration is water, without which this route never can be made available as a great public highway. There is little doubt that by digging, water may be found on the desert between the head of the Concho and the Pecos. At the depressions, called Mustang Ponds and Wild China Ponds, where, it appears, water has sometimes been seen, wells might easily be sunk and water be procured. Two watering places in this jornada of sixty-nine miles would be quite sufficient. On the western side of the Guadalupe Mountain there should be another watering place; but it is evident from the statements made by the party which had been so long encamped at the Salt Pond, that there exists several springs about the base of the mountain. Next come the Cornudos del Alamo and the Waco Mountains; where there are springs, but which, from their not being opened, soon dry up or disappear. These, being at proper distances for daily journeys, would be suitable places to sink wells, or, which would be better, to open the springs already known.

If it should be determined to make a great highway through Texas to El Paso, and thence to California, south of the Gila, neither of the present routes to El Paso should be adopted until a more complete exploration has been made. I was told at El Paso, by Mexicans who had traversed the district east of that town, that water could be found in the mountains that separate El Paso from the Pecos, between the routes now taken. Should such be the case, and no impediment exist, at least fifty miles of travel might be saved; and if water is not now found, it may as easily be obtained, by sinking wells, as on the northern route. The whole country, after the table-land north of San Antonio is reached, is well adapted to a wagon road or a railway; and I doubt whether any district of the same extent east of the Mississippi would require fewer embankments and excavations than across the table-land of Texas.

SECOND DIVISION.

EL PASO TO THE COPPER MINES.

CHAPTER VII.

EVENTS AT EL PASO.

Losses of Animals—High price of provisions at El Paso—Excursion up the river—Entertainment given to the officers of the Commission by the civil authorities—The Bishop of Durango—Pueblo Indians—Meeting with General Condé, and commencement of the labors of the Joint Commission—Arrival and disposition of the main body of the United States Commission—Arrival of ox-train, and death of U. D. Wakeman—Departure of military escort for the Copper Mines—American desperadoes in New Mexico—Death of E. C. Clarke—Trial and execution of Wade, Craig, and Butler—Trial and execution of Young—Dinner and ball given under difficulties—Excursion to the Sierra Waco—Indian pictures at the Waco Tanks—Initial point agreed upon, and survey in its vicinity commenced—Dépôt established at the Copper Mines—Dr. Webb's report on the same.

On reaching El Paso, I feared that the ten mules sent out by Major Van Horne to my assistance would be insufficient, as so many of our animals had suddenly given out when I left the train. On making my fears known to Mr. Magoffin, an American merchant here, he generously ordered four of his own men to take ten of his best mules and set off immediately to aid the train in getting in; and, in consequence, it arrived in safety five days after.

I have not mentioned the loss of animals, save on two or three occasions, although several other instances of this misfortune occurred to us. The fine horse which was bitten by a rattlesnake died a few days after. On the last day, two horses which had been led for several days lay down, and refused to go further. They were left within ten miles of our journey's end. I sent a man back immediately on my arrival with corn and water; but he was too late, both were already dead. But though the losses of this kind were few on the march, they were great after we got in. There were no sheds or barns in which the animals could be placed to protect them from the cold winds which prevailed at this season of the year; and the grass was very poor. I procured corn for them at once, and sent them to a grove a few miles above the town, where they would be better protected than if running at large over the open plain. But about a week after my arrival a severe norther came on, bringing with it the cold blasts from the snowy mountains, which had such an effect upon the poor creatures, that twelve or fourteen mules and horses perished.

Provisions of all kinds were exceedingly high at this time: flour, thirty-two dollars a barrel; pork, sugar, and coffee, fifty cents a pound; and other articles in proportion. Corn too, was selling at eight dollars a fanega of two and five-eighths bushels. The arrival of my party rather tended to increase prices; for the population was so limited, that the addition of forty men and sixty animals, with a knowledge that a large train with the main body of the Commission and its escort would soon arrive, led the owners of such property to keep up the rates. The Government, however, had given me authority, in cases of necessity, to call upon the United States Commissaries of Subsistence for provisions; and hence the immediate wants of my party were provided for by the officers of this post. Corn and fodder for the animals, however, had to be purchased at the market prices.

General Garcia Condé, the Mexican Commissioner, had not yet reached El Paso, though intelligence had been received here that he was at the city of Chihuahua; word was therefore sent to him at once, that the United States Commission had arrived.

In order to make myself familiar with the country in the vicinity of El Paso before the Commission should enter upon its duties, I made an excursion, in which I was accompanied by Major Van Horne and several gentlemen of my party, over the mountain ridge which crosses the Rio Grande a few miles above the town. We passed up on the Mexican side of the river, crossing over to the American side at White's Ranch, a course which we followed in returning. About a mile above the town is a fall in the river, where a dam has been constructed, and the water raised about ten feet, for the purpose of irrigating the valley below. There are two grist mills here, one on the Mexican, the other on the American side of the river. For the distance of eight miles, as it is called, above El Paso, there is no bottom land, the river breaking its way through the mountains the whole distance. The range on the eastern side, called the El Paso Mountains, rises to a height of about one thousand five hundred feet. It is a continuation of the Sierra de los

Organos, or Organ Mountains, and approaches within two miles of the river, where it drops off into spurs of about two hundred feet in height. These hills or spurs cross the Rio Grande, and unite with another range eight or ten miles to the west. It is through these spurs or lesser range of limestone hills that the river has forced its way.

November 9th. In company with the officers of the Boundary Commission, I attended to-day a public dinner given to us by the civil authorities of El Paso. The officers of the United States army, stationed opposite the town, were among the guests, as well as the principal citizens of the place. The dinner was served up in true Mexican style, with a great variety of dishes; and, with the exception of vegetables, of which there is a great deficiency in the country, the entertainment would have been creditable even in our Atlantic cities. The wine drank on the occasion was Champagne, claret, and *vino del pais*, or wine of the country. The latter was an excellent article, the best I ever found at El Paso. When the cloth was removed, toasts were drunk, and some songs sung. The best feeling existed throughout the evening, and the affair terminated to the satisfaction of all present.

November 23d. Accompanied by Major Van Horne and several gentlemen of the Commission, I went to pay my respects to the Bishop of Durango, then on his return from a visit to New Mexico. He was a venerable man of about seventy years, with a countenance exhibiting great benevolence and intelligence. I found him affable and courteous in his manner, fond of conversation, and manifesting a deep interest in the welfare of his people in New Mexico and the northern states of Old Mexico, all of which are comprised in his diocese. From the city of Durango, where he resides, he had been about fifteen hundred miles, to the north, visiting his churches in the most extreme points of New Mexico. He was accompanied by Dr. Rubio, his secretary. In his journey north of El Paso, when he entered the territories of the United States, the Bishop received every attention from the civil and military authorities, and was furnished with escorts by the latter through such portions of the country as could not be traversed in safety without. His gratitude for this kindness was warmly expressed. He made particular inquiries about the United States Boundary Commission, the duties intrusted to it, the character of the country it would have to explore, the Indian tribes, etc., etc.

The next day we rode over to El Paso, to attend mass, and hear a discourse from the Bishop. His congregation was large and attentive. Crowds of well dressed persons were assembled around the exterior of the church, unable to gain admission. This was a fine occasion to see the people, as there was a general turn out. The women all wore dark *rebosos*, or scarfs, around their heads and shoulders, and in general were gaily dressed. The more genteel appeared in black. Much attention is paid to costume, and the señoritas fully appreciate the effect of particular colors on the complexion; hence, one seldom sees in Mexico those delicate lilacs, pinks, and sky-blues which are so much worn by, and are so becoming to, the fair Anglo-Saxon. Bright colors are mostly worn, which set off the

Mexican brunettes to great advantage. After church we were invited by Don Guadalupe Miranda to partake of refreshments at his house. Grapes, apples, and pears were served up, together with El Paso wine. The grapes were as fresh and plump as when gathered. In the afternoon, the Bishop, Dr. Rubio, and Padre Ortiz, accompanied by several of their friends, called on me. I served up a collation of such things as my commissariat could furnish; though the *carte* was rather limited, as the train which contained our provisions had not yet arrived.

November 25th. Crossed the river on horseback to make some purchases in the town; and while there, met a party of Pueblo Indians, who were just entering. The men were chiefly dressed after the manner of the lower class of Mexicans. They wore short jackets, decorated with innumerable bell-buttons, and dark pantaloons with similar buttons, open at the outside from the hip to the ankle, with large white trowsers beneath. The women all wore short black dresses, reaching just below the knees, with a thin white muslin mantle thrown over their shoulders. A bright red silk shawl was tied around their waists, and they had bunches or bows of gay ribbons in their hair. All their faces were painted alike, with a spot of vermilion on each cheek, surrounded by a border of small, white dots. The women held in each hand a large turkey feather, which they moved up and down, keeping time with their music. The men carried flint muskets, and one of them a drum, on which he was beating constantly. All joined in singing a monotonous tune, and, when they reached the church, stopped and commenced dancing. They formed lines similar to those made for a contra dance by us, passing through a variety of figures and marchings. From the perfect regularity with which they went through these figures, they must have followed some established forms. The Indians belong to the old Piro tribe, and dwell in the same village of Sinecu which their ancestors occupied two centuries ago. They are now dwindled to about eighty souls; and but few of these are pure stock. Their language is retained by them, though less used than the Spanish. Another generation will probably extinguish the language; though the mixed race may long occupy their present ground, and retain the manners and customs of their forefathers.

November 28th. About 8 o'clock in the evening, Captain Barry and Mr. C. J. Sheldon arrived from our large train, which they left about two hundred miles behind, having been sent in advance to procure mules and forage. They had, like ourselves, experienced very severe weather; and their animals were so much reduced, that it had been feared they could not reach the settlements. They also informed me that the wagons and carts drawn by oxen, being unable to keep up with the mule train, had been left behind some weeks earlier, with all the provisions not necessary to bring the party with the mule train in. I regretted exceedingly to hear this news, as the military escort under Colonel Craig was with Colonel McClellan and the mule train, while the ox train, containing much valuable property in addition to the provisions, was in charge of only a wagon-master and a few men. Word was sent me by the Commissary that it would be necessary to procure at once some provisions, to be ready on the arrival of the mule train; as the officer in command had not taken enough to bring them through, and he had been compelled to call upon Colonel Craig for a supply already. By the gentleman alluded to, I received a mail with important dispatches from the government, apprising me that Colonel McClellan, the chief astronomer of the Commission, was removed, and that Colonel J. D. Graham would be appointed to fill his place.

I made arrangements at once, with the United States Commissary of Subsistence at El Paso, to furnish provisions for the expected party, which were placed at San Eleazario, a town about twenty-five miles below, where quarters could be procured for them during the cold weather, or until they entered the field for active duty. The flour being of a very fair quality made at El Paso, I contracted for a supply, at ten and a half cents a pound, about twenty dollars a barrel. For corn, the Quarter-master was compelled to pay six dollars and a half a fanega, or about two dollars and a half a bushel.

December 1st. General Pedro Garcia Condé, with the other officers of the Mexican Commission, reached El Paso to-day.

December 2d. Received a note this morning from General Condé, announcing his presence, and his readiness to carry out the agreement entered into by the Joint Commission in California, on the 15th February last. I replied immediately, congratulating him on his safe arrival, and stated that I would do myself the honor of calling upon him at 12 o'clock.

At the appointed time I crossed the river, accompanied by Major Van Horne, Lieutenant Wilkins, Dr. Webb, Secretary of the Commission, and Mr. J. C. Cremony, Interpreter. We met General Condé, with his officers and engineers; also Colonel Langberg, a Swedish officer in the Mexican army, who was then in command of a body of troops just arrived from Chihuahua, for the protection of the frontier against the Indians. The interview was an agreeable one, the engineers connected with the Mexican Commission being gentlemen of education, and graduates of the Military School at Chepultepec. The Interpreter was Don Felipe de Iturbide, the younger son of the late Emperor.

I expressed a desire to General Condé to proceed to business as soon as possible, as we had a large number of engineers and other scientific men in our party, who were anxious to enter their field of labor. The General acquiesced in my wishes, and said he would meet me to-morrow at my quarters.

December 3d. General Condé, with his son Don Augustin Condé, who acts as his Secretary, and Don Felipe de Iturbide, called by appointment at 10 o'clock, A. M., when the first meeting of the Joint Commission to run and mark the boundary between the United States and the Republic of Mexico, under the treaty of Guadalupe Hidalgo, took place. Two hours and a half were spent at this first session, when we adjourned to meet at the quarters of General Condé the following day.

The meetings of the Joint Commission were held twice a week after this, though there were interruptions at times from the ice in the river, which prevented parties from crossing. Great difficulties were presented, in consequence of errors in the map to which the Commissioners were strictly confined; so that I feared we should not be able to agree upon the southern boundary of New Mexico. This is a line connecting the Rio del Norte with the Gila. According to the treaty map (which is Disturnell's Map of Mexico, of 1847), the point where the Rio Grande or Del Norte, strikes the southern boundary of New Mexico, is in latitude 32° 22′ north. Thence it runs westward three degrees to 107° 40′ longitude west from Greenwich.

On the 9th of December, the main body of the Commission, which I left at San Antonio, reached San Eleazario, and went into quarters at that place and at Socorro, a town six miles north of it. It was impossible to find quarters for all at either place. My official duties required me at El Paso, where about a dozen officers and laborers were quartered. Quarter-master Myer, with the mules, wagons, etc., and Mr. George F. Bartlett, Commissary, with the subsistence stores, were established at Socorro, while Lieutenant A. W. Whipple, who (by order of the Secretary of the Interior) had been appointed Chief Astronomer, *ad interim*, had set up his Astronomical Observatory at San Eleazario. The officers, mechanics, laborers, etc., were divided between the two places where their services were most required.

January 8th. There was quite an excitement to-day, in consequence of a theft by the Indians of forty mules belonging to Mr. Magoffin, while they were grazing in charge of four men on the plateau, three miles from my quarters (then at Mr. Magoffin's house), and about the same distance from the military post. A party of the Commission immediately volunteered to go in pursuit. The best horses to be had were procured as soon as possible; and each man, taking a rifle, a six-shooter, and a blanket, was in the saddle within two hours after the news of the robbery reached us. They soon fell on the robbers' trail, which they followed for some distance towards the Waco Mountain, when it turned north-west. They continued on until the trail struck the Santa Fé road, when they gave up the pursuit and returned the next day.

January 9th. The ox train left behind by Colonel McClellan arrived at San Eleazario to-day, having suffered severe hardships on the route. It left San Antonio, as I have before stated, with the main body of the Commission, on the 14th of October, and had therefore been nearly three months on the way. On the 8th of December a sad event took place, which resulted in the death of Mr. U. B. Wakeman, the wagon-master in charge of the train. The circumstances as related to me are as follows: With the train there was a Captain Dobbins, formerly of the United States Army, who had been cashiered for some misconduct. This individual, being a personal friend of Colonel McClellan, induced the latter to give him employment as a kind of guide and hunter for his party; to which arrangement, being unacquainted with the man's history and character, I consented. On leaving the ox train behind, the Colonel directed Dobbins to remain with it. On the day alluded to, Mr. Wakeman was occupied in hunting up the oxen, and did not return till late at night, when he found some parties gambling. He ordered it to be stopped, and Dobbins refused to obey. High words arose, when Dobbins rushed from his tent and discharged his revolver twice at Mr. Wakeman, both balls taking effect. He died of his wounds ten days after.

On the arrival of the train, Captain Dobbins surrendered himself to the authorities, underwent an examination, and was acquitted on the testimony of some of the teamsters, who alleged that he had acted in self-defence.*

January 13*th*. Rode to *Doña Ana*, a small town on the eastern branch of the Rio Grande, where we have a military post, under the command of Major Shepard. The distance, which is 56 miles, was made between 9 o'clock, A. M., and 6 o'clock, P. M., in my carriage, drawn by four mules. The only intermediate town is *Las Cruces*, eight miles from Doña Ana.

As Colonel Craig was here with the escort of the Commission, which he was about to march to the Copper Mines on account of the advantages which he believed that region offered as a camping-place, I requested Dr. Webb, Mr. George Thurber, and Mr. Cremony to avail themselves of the protection of the escort, and examine that district of country, and the old town there, as to their capabilities with reference to water, wood, grass, buildings, etc. I transferred my carriage to them, understanding that a good road would be found most of the way. In addition to these, a train of twenty large wagons, belonging to S. Hart, Esq., loaded with corn and provisions for the escort, was going at the same time, and would open a road wherever it was necessary. On the 16th, I set out on my return to El Paso, and arrived there the following day.

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* I derive my information from documents sent to me, which are printed in Senate Document No. 119, 32d Congress, 1st session, pages 496, 497, and 498. The particulars of the examination which took place at San Eleazario, were never furnished me, and I only know from hearsay the grounds on which Captain Dobbins was acquitted.

During my absence, the Indians made another descent upon the inclosure near Mr. Magoffin's house in which he kept his mules, and stole thirty. Several men were sleeping in the wagons within the corral at the same time; yet so quietly was the robbery committed, that the loss was not discovered till morning.

When the Boundary Commission landed on the shores of Texas in August, 1850, it was necessary to employ about fifty teamsters, and many laborers, cooks, etc.; and the Quarter-master, whose duty it was to engage the former, was obliged to take such as offered themselves, giving the preference, of course, to such as could produce testimonials of good character. He found many who had been in the government employ, who had good testimonials; but there were others who possessed no such credentials. Hence several men who afterwards turned out to be worthless characters obtained menial places in the Commission. On the arrival of the several parties at El Paso and San Elezario, it was necessary to discharge a large number, chiefly of the teamsters; and such as were found to be of bad habits or vicious disposition were paid off and discharged. There were also many very good men, who, having families at San Antonio, engaged only for the trip, and who, on being paid off, returned immediately to that place.

Other trains which had preceded us, and some that arrived about the same time that we did from New Mexico, including emigrant trains bound for California, were disbanded here, leaving numbers of the outcasts of society referred to, with little means of support. But means or money were not of much consequence to these people: for their habits of gambling were such, that those who had money soon got rid of it.

The discharging of so many worthless and vagabond men at Socorro, where the trains usually made it their rendezvous, threw upon the peaceful inhabitants of that place a set of ruffians, who, by daily increase of numbers, had become so formidable, that the life of no one was considered safe beyond the walls of his own house. And even within them, there was no security; for several of these men had actually forced themselves upon the occupants, and compelled them to give them a home. Unused to such interlopers, and unable to obtain redress, several Mexican families abandoned their dwellings, and sought refuge on the opposite side of the river, or removed to other settlements.

The first check given to this band of gamblers, horse thieves, and murderers, was the arrival of the United States Boundary Commission at Socorro. The presence of a body of well armed, well disposed, and spirited young men, tended to make these ruffians more circumspect for a time; but as the former were gradually drafted off, to enter upon the duties connected with the Survey, the latter became more overbearing and insolent in their conduct. Houses were opened for the indulgence of every wicked passion; and each midnight hour heralded new violent and often bloody scenes for the fast filling record of crime. The peaceable Mexicans hastened to pack their little store of worldly wealth, and, with their wives and children, fled from the rapidly depopulating village. Every new outrage escaping the notice of those in authority gave additional boldness to the desperate gang surrounding us. None dared stir from home without being doubly armed, and prepared to use their weapons at a moment's warning; for the turning of a corner might bring one to the muzzles of a dozen pistols.

After several murders had been committed, and horror and dismay filled the breasts of the orderly part of the community, it was resolved to ask for assistance from the military post at San Eleazario, six miles distant. A note was written by the Quartermaster and the engineers, giving a history of what had occurred, and representing the alarming condition of things at the time. The messenger returned with an answer from the commanding officer, declining to furnish any assistance, on the ground that the application should first be made to the civil authorities.*

In the evening, a dancing party was given in the place, an almost nightly amusement in all Mexican and frontier towns, which, as usual, was attended by quite a mixed company. As these dancing parties, called "fandangos," are open to all, the vagabonds prowling about at the time were numerously represented on the occasion referred to, and made themselves conspicuous by their conduct. Pistols were fired over the heads of the females, who, in their alarm, attempted to escape from the room; but this was prevented by ruffians stationed at the door. By this time there was a great excitement within, and several desperadoes commenced using their bowie-knives. Mr. Edward C. Clarke, the Assistant Quarter-master of the Commission, who was present on the occasion, was the first person upon whom the ruffians attempted to satiate their thirst for blood. Four attacked him with their knives, and he fell near the door dreadfully wounded. He was immediately taken to the quarters of Dr. Bigelow, the surgeon of the Commission, who, on examination, found he had received nine or ten deep wounds, inflicted with bowie-knives, in his breast and abdomen. Another man named Gates was also wounded by a pistol-shot in the leg. Dr. Bigelow at once pronounced the wounds of Mr. Clarke mortal, and he died the following morning.

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* I am indebted to a gentleman of high standing connected with the Commission for the particulars of the death of Mr. Clarke, and the trial and execution of his murderers. He was stationed at Socorro when the events transpired, and was often brought in contact with the principal actors in them. He attended the trial of all, and took down the confession of Young, the man last executed. From others equally conspicuous, and who were also residents there at the time, I have received similar accounts. I do not think, therefore, there is any exaggeration in the narrative, but believe that what is stated is strictly true.

When the startling announcement was made, that an officer of the Commission had been foully murdered by the wretches whose lawlessness had before gone too long unchecked, the question arose, what was to be done? Aid from the military had been refused. The alcalde of the village, a weak and sickly imbecile, had transferred his authority to another even more timid and less reliable than himself; yet this person was invested with the powers of a justice of the peace, by authority of a commission from the State of Texas, and constituted the entire civil authority at Socorro.

In this alarming condition of affairs, the members of the Boundary Commission present were compelled to move in the matter, and resolve upon some plan to protect not only their own lives and property, but also those of the trembling and dismayed population about them. Messengers were immediately sent to San Eleazario, for assistance from the main body of the Commission, there engaged in various duties. The call was promptly responded to; and in about three hours a party of Mexicans and Americans were collected together. They hastily armed themselves, and, joined by members of the Commission, proceeded at once to Socorro, where many of the citizens were already assembled awaiting them. The force was now divided into several parties, and a systematic search at once commenced to ferret out the murderers. Every house was examined, and eight or nine persons arrested; but a man named Young, who had been most conspicuous in the affray, was not to be found, having, it was said, escaped from the village in the morning. The prisoners were immediately conducted by an armed guard to the house of Justice Berthold, where a court was instituted to suit the emergencies of the case. Juries were summoned and sworn, a prosecuting attorney named, and counsel for the defence offered to the prisoners, which they declined, treating the offer as a jest, and making vulgar and obscene remarks upon their position. Nevertheless, an individual tendered his services for the defence, and occasionally cross-questioned the witnesses. The prisoners were evidently under the impression that nothing would be done, believing that, by the mutual understanding between them, they could easily swear themselves out of the difficulty. The examinations were conducted with propriety, and the prisoners made to keep silence by the resolute demeanor of the citizens present.

In selecting the jury, six were taken from the Mexican citizens of Socorro, and six from the Boundary Commission, as there were no other Americans in the place. The presiding magistrate, Justice, Berthold, was a highly respectable citizen, long resident there, of French origin.

It is doubtful whether in the whole history of trial by jury a more remarkable scene than the one here presented was ever exhibited. The trial took place in one of the adobe or mud-built houses peculiar to the country, which was dimly lighted from a single small window. Scarcely an individual was present who had not the appearance and garb of men who spend their lives on the frontier, far from civilization and its softening influences. Surrounded as we had been, and now were, by hostile Indians, and constantly mingling with half civilized and renegade men, it was necessary to go constantly armed. No one ventured half a mile from home without first putting on his pistols; and many carried them constantly about them, even when within their own domicils. But, on the present occasion, circumstances rendered it necessary for safety, as well as for the purpose of warning the desperate gang who were now about to have their deserts, that all should be doubly armed. In the court room, therefore, where one of the most solemn scenes of human experience was enacting, all were armed save the prisoners. There sat the judge, with a pistol lying on the table before him; the clerks and attorneys wore revolvers at their sides; and the jurors were either armed with similar weapons, or carried with them the unerring rifle. The members of the Commission and citizens, who were either guarding the prisoners or protecting the court, carried by their sides a revolver, a rifle, or a fowling-piece, thus presenting a scene more characteristic of feudal times than of the nineteenth century. The fair but sunburnt complexion of the American portion of the jury, with their weapons resting against their shoulders, and pipes in their mouths, presented a striking contrast to the swarthy features of the Mexicans, muffled in checkered *serapes*, holding their broad-brimmed glazed hats in their hands, and delicate cigarritos in their lips. The reckless, unconcerned appearance of the prisoners, whose unshaven faces and dishevelled hair gave them the appearance of Italian bandits rather than of Americans or Englishmen; the grave and determined bearing of the bench; the varied costume and expression of the spectators and members of the Commission, clad in serapes, blankets, or overcoats, with their different weapons, and generally with long beards, made altogether one of the most remarkable groups which ever graced a court room.

Two days were occupied in the examination and trial: for one immediately followed the other. In the mean time, a military guard of ten men had been promptly sent to our aid by Major Van Horne, the commanding officer at El Paso, on my requisition: so that the open threats which had been made by the friends of the prisoners during the first day of the trial, were no longer heard; for they now saw that the strong arm of the law would triumph.

The second day, a member of the Commission who manifested a deep interest in the prisoners, was requested by one of them to act as his counsel; but his efforts to prove an alibi, to impeach the testimony of some of the witnesses, and to establish the previous good character of the defendant, proved utterly futile. The prisoners were then heard in their own defence; but they could advance nothing beyond the mere assertion of their innocence. At the close of the testimony, an attempt was made by one of the friends of the prisoners to postpone the trial, for the purpose, as he stated, of obtaining counsel and evidence from El Paso. But the court had been apprised of the existence of a plot for attempting a rescue that night, and accordingly the request was refused.

The evidence being closed, a few remarks were now made by the prosecuting attorney, followed by the charge of the Judge, when the case was given to the Jury. In a short time they returned into court with a verdict of guilty, against William Craig, Marcus Butler, and John Wade; upon whom the Judge then pronounced sentence of death.

The prisoners were now escorted to the little plaza or open square in front of the village church; where the priest met them, to give such consolation as his holy office would afford. But their conduct, notwithstanding the desire on the part of all to afford them every comfort their position was susceptible of, continued reckless and indifferent, even to the last moment. Butler alone was affected. He wept bitterly, and excited much sympathy by his youthful appearance, being but 21 years of age. His companions begged him "not to cry, as he could die but once!"

The sun was setting when they arrived at the place of execution. The assembled spectators formed a guard around a small alamo, or poplar tree, which had been selected for the gallows. It was fast growing dark, and the busy movements of a large number of the associates of the condemned, dividing and collecting again in small bodies at different points around and outside of the party, and then approaching nearer to the centre, proved that an attack was meditated, if the slightest opportunity should be given. But the sentence of the law was carried into effect.

The entire proceedings were intensely interesting, and the scene of a character which none present desired ever again to witness. The calm but determined citizens on the one side, and the daring companions of the condemned wretches on the other, remained throughout keenly on the watch: the first for the protection of life, and the support of good order in the community, the other with the malicious eyes of disappointed and infuriated demons, who, to rescue their companions, would have been willing to sacrifice a hundred additional lives.

All three of the criminals had been connected with the Boundary Commission. Wade was an Englishman, and had driven one of the teams in my small party. He was found to be a desperate villain, and I took the first opportunity to discharge him on my arrival at El Paso. Craig was a cook in the main body of the Commission, and a Scotchman by birth. Butler was an American. He joined the train under Col. McClellan, after it had left San Antonio, in some menial capacity, and was discharged on arriving at Socorro. He was accused of having murdered a Mexican near Eagle Pass, and was fleeing when he met the train of the Commission.

Socorro now resumed its previous quiet and good order; for the authorities had directed all persons who were unconnected with the Commission, and were without any employment, to leave the place within twenty-four hours. This, however, was hardly necessary: for the guilty and vagabond throng had already begun to depart, and before the close of another day all had left. But there was one other, and he the principal actor in all the scenes I have related, who was yet to be apprehended and made to pay the penalty of his great crimes, before the demands of justice were answered.

Four hundred dollars were subscribed by the members of the Commission, and offered as a reward for the apprehension of Alexander Young, the ringleader of the gang of desperadoes, and his delivery at Socorro. Volunteer parties set out in all directions, tempted by the prospect of gaining the large sum offered, and at length word was brought that he had been arrested at Guadalupe. Thus another unpleasant duty immediately presented itself; but it was impossible to avoid it.

The prisoner arrived in the evening, and was placed in confinement, well chained and guarded. During the night, he was visited in jail. It was observed that the careless, dogged look had left his eye, and was replaced by a supplicating glance that told plainly of a change within. He was anxious to know if either of the three who had been executed had made a confession, and said he had given up all hopes of life. Being asked if he wished to write to any one, he answered that he would like to have a letter written to his mother, who had not heard from him for six years past. The letter was written, and the prisoner appeared much affected. He confessed the truth of the charges against him, criminating clearly, and to a still greater extent, the three who were hung first, besides many others.

At 10 o'clock the following morning, February 12th, the court again met, and a jury was empanelled. At the opening of the court, a letter of the prisoner, containing his confession, was read publicly, then signed by himself, and witnessed by certain members of the court and other individuals present.

With the testimony already before the court, the jury could have brought in an immediate verdict: but it was deemed advisable to present other evidence, to show still further the unmistakable guilt of every one who had been punished; especially as one or two persons, who passed for honest and honorable men, were interested in upholding the character of their associates. The prisoner was found guilty, and sentenced to be hanged. At 4 o'clock, P. M., of the same day, he was taken to the church; where, with penitent lips, and on bended knees, he made his final confession, received the blessing of the priest, and from thence was taken to the spot where he was to be executed. His last request for himself was that he might be buried as respectably as the circumstances of his case would admit. While standing under the tree, with the rope around his neck, he begged to be allowed to say a few words to those around. He exhorted those both younger and older than himself, to take warning from his example. They could see what gambling, swearing, drinking, and an ungovernable temper, with evil associates, had brought him to. He had run away from home at the age of fourteen, and would never see that home again. With other remarks of like character, he concluded. At half past 4 o'clock, P. M., the law was carried into effect, using the same tree where the three others were executed. Young was a native of one of the western States. He had been several years on the Mexican frontier, and was well known in Texas as a most desperate character.

The well-merited punishment of these four men was highly applauded and justified by both the civil and military authorities of the frontier. Such an example had been needed for some time. The vicinity was now rid of gangs of worthless desperadoes; and as a Mexican citizen of the peaceable old town of Socorro remarked, "We can now sit in the evening at the doors of our houses, and not be obliged, as before, to retire with the sunlight, fix bolts and bars, and huddle into corners with fear and trembling."

February 22d. In return for the civilities extended to me and the officers of the Commission by the authorities of El Paso, I gave a dinner to the Mexican Commission and the public authorities, which came off yesterday; several officers of the United States army stationed here were also among the guests. In the evening, I invited the principal citizens of the town to a ball and supper, and was honored by the attendance of about fifty ladies. Mr. Magoffin, whose house, in which I had my quarters, was the most spacious on the river, threw the whole open for the occasion, giving me thereby ample accommodations for the large party which had assembled. But as the greater portion of the company lived on the opposite bank of the river, it was no easy matter to get them together. I therefore sent my carriage, and others that were kindly furnished me, for my guests; and as it was between three and four miles from my quarters to El Paso, including the fording of the Rio Grande, it was necessary to begin fetching them at the unfashionable hour of four o'clock in the afternoon. The river had to be forded by daylight, in consequence of the frequent changes in the channel and the bars.*

I was quite at a loss for furniture and fittings for my entertainment. Chairs were borrowed of the neighbors far and near; but even with these I had not half seats enough for the company. This, however, proved no great inconvenience; for the Mexican ladies, preferring to sit *à la Turk*, formed a double row around the dancing room. The señoras occupied the trunks, chairs, and settees, and the señoritas the carpet in front. My friends in the vicinity kindly furnished me with tables, lamps, dishes, and such other necessaries as the occasion required. To light the large hall properly most tried my ingenuity; but this difficulty was overcome by means of a new-fashioned chandelier improvised by one of our gentlemen for the occasion. Sockets for the candles were first required; and these were constructed out of the tin boxes in which sardines had been preserved. Next, a hoop from a pork barrel was divested of its bark, and wrapped around with binding of a bright scarlet hue, which had been brought out to decorate the heads of the fair Apaches and Comanches, as well as the tails and manes of their animals. Into this hoop or frame the tin sockets were fixed, and the whole supported by several loops of the same elegant material fastened to a common centre. Such was the style and origin of our chandeliers, with their dozen burners each; four of which, suspended from the ceiling, shed such a ray of light upon the festal hall, as rendered the charms of the fair señoritas doubly captivating. The evening passed off pleasantly; and all danger of crossing the river was obviated by the company remaining till eight o'clock the following morning. After treating all to a cup of coffee, the carriages and other vehicles were ordered up, and the company conducted safelv to their homes.

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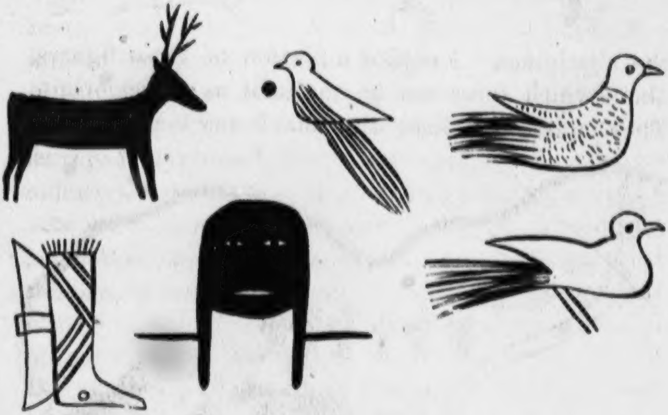
* Accidents often happened in fording the river at night. But a short time previous a party of Americans, with ladies, in attempting to cross when it was quite dark, missed their way, and nearly perished. Their carriage remained more than an hour filled with water in the middle of the river. They could not land except at the regular fording place, as the banks were steep: and they were only rescued by making themselves heard by people near the shore. I once got into a similar dilemma myself. I and my companions had to get out of the carriage windows and stand upon the tops of the wheels, while the driver was sent for assistance. Several Mexicans came, and, taking one on each of their backs, carried us safely on shore, though a little the worse for our immersion.

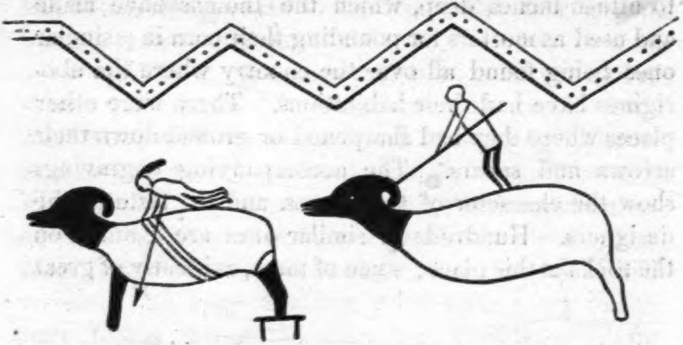
March 8th. Major Shepard, commanding at Doña Ana, gave me information to-day that seven soldiers belonging to Colonel Craig's command, had deserted from our escort at the Copper Mines, and wished me to aid him in having them arrested and brought back. With this view, I rode over immediately to the quarters of General Condé, at El Paso, accompanied by Major Van Horne, to ask his co-operation. The General agreed to send a courier at once to the military commandant at Chihuahua, three hundred and twenty miles distant, requesting him to take such measures as would lead to the capture and restoration of the deserters, if they should be seen at any of the military posts on the frontier.

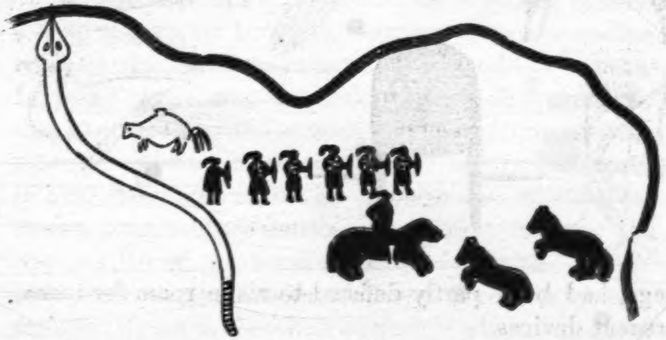
March 28th. Made up a little party of nine persons, besides a cook and servant, for an excursion to the Sierra Waco, about thirty miles distant, the last stopping place on our journey from San Antonio. It was so interesting a spot, and our stop there was so short, that I determined at the time to take an opportunity to revisit it, in order to make a more thorough examination. We left at eight o'clock, A. M., with my carriage and one wagon for camp equipage, cooking utensils, and provisions, all the gentlemen going on horseback or on mules. After a very tedious ride over a sandy road, we reached the tanks at four in the afternoon, and encamped near a natural cavern in the rocks, where we found excellent water. As this was a favorite place of resort for the Apaches, we did not feel safe until we had climbed the rocks which overhung our place of encampment, and searched for "Indian sign." We found many traces of visitors, such as the marks of mules, on the very summit of the rock, but none recent. A party had evidently been there some time before us, which, for concealment, had taken their animals to the top of the rock in preference to leaving them below.

March 29th. The night had been cold, but to-day it was quite warm. Rambled over the great rocky mass to see what could be found of interest. Discovered several pools or tanks of clear and beautiful water, where it had collected from rains, or the melting of snows. The formation here is granite in place, rising from 100 to 150 feet above the surrounding plain, and covered with huge boulders piled up in every imaginary form. Along the sides and base these great boulders also lie; whence the inference seems natural that this rocky mass existed before the mountains in the vicinity were heaved up, as there are no boulders on the adjacent hills. As might be supposed in such a heap of gigantic boulders, there are many cavern-like recesses which seem to have been the abode of Indians. In many places, too, the rock projects or overhangs; and in others frightful chasms, as though rent asunder by some violent concussion, appear: all of which seem to have been known to the Indians, and in some instances long used by them as places of habitation. At one portion of the southern mass, nearly half a mile from the road, there is an overhanging rock extending for some distance, the whole surface of which is covered with rude paintings and sculptures, representing men, animals, birds, snakes, and fantastic figures. The colors used are black, red, white, and a brownish yellow. The sculptures are mere peckings with a sharp instrument, just below the surface of the rock. On the shelving portion of the place in question are several circular holes in the solid granite from twelve to fifteen inches deep, which the Indians have made and used as mortars for pounding their corn in; similar ones being found all over the country where the aborigines have had their habitations. There were other places where they had sharpened or ground down their arrows and spears. The accompanying engravings show the character of the figures, and the taste of the designers. Hundreds of similar ones are painted on the rocks at this place; some of them, evidently of great age, had been partly defaced to make room for more recent devices.

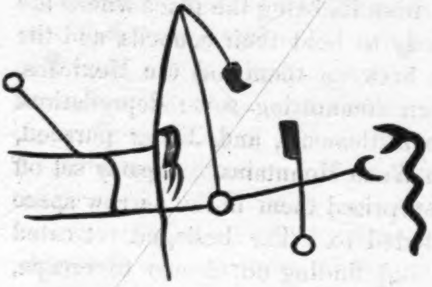


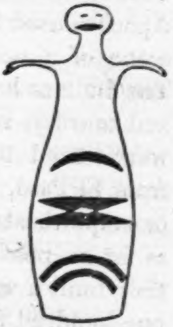
The overhanging rock beneath which we encamped seemed to have been a favorite place of resort for the Indians, as it is at the present day for all passing travellers. The recess formed by this rock is about fifteen feet in length, by ten in width. Its entire surface is covered with paintings, one laid on over the other; so that it is difficult to make out those which belong to the aborigines. I copied a portion of these figures, about which there can be no doubt as to the origin. They represent Indians with shields and bows, painted with a brownish earth; horses with their riders; uncouth looking animals; and a huge rattlesnake. Similar devices cover the rock in every part, but are much defaced. Over these are figures of late travel-

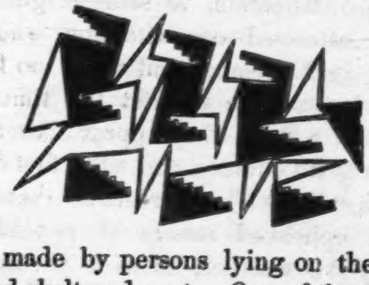




lers and emigrants; who have taken this means to immortalize their names, and let posterity know that they were on their way to California. Near this overhanging rock is the largest and finest tank or pool of water to be found about here. It is only reached by clambering on the hands and knees fifteen or twenty feet up a steep rock. Over it projects a gigantic boulder, which, resting on or wedged between other rocks, leaves a space of about four feet above the surface of the water. On the under side of this boulder are fantastic designs in red paint, which could only have been made by persons lying on their backs in this cool and sheltered spot. One of these, a singular







geometric figure, I copied while resting in the same position secluded from the burning sun.

In a deep cleft in the rock, on the south side of the road which we followed for one hundred and fifty feet into the interior, were many bones of wild beasts. Near this the hills expand, forming an amphitheatre, which is celebrated from its being the place where the Apaches used formerly to hold their councils, and the scene of a contest between them and the Mexicans. The Indians had been committing some depredations and murders in the settlements, and, being pursued, were traced to the Waco Mountains. A party set off from El Paso, and surprised them in the narrow space or amphitheatre alluded to. The besieged retreated as far as possible; and finding no chance to escape, they built a wall across the entrance, which is about one hundred feet from one perpendicular mass of rock to the other. Here they were kept several days, when they were finally overcome, and all, to the number of a hundred and fifty, put to death.

In the afternoon we walked about two miles to the centre of the plain, which is bounded on the west by the great Waco Mountain, to some singular piles of rocks, which attracted our attention when passing through here in November, but were too far off the road for us to examine them at the time. At the distance of half a mile, they appear like the ruined walls of some great edifice; and when first discovered, all exclaimed, "Ruins!" On reaching them, we found them to be upheaved masses of reddish granite, blackened by the weather, so as to present, in their detached position in the plain, a strong resemblance to ruined buildings. There were three groups of these singular rocks, a few rods apart, entirely disconnected, yet of the same general character. Their sides were perpendicular, like walls; their height about sixty feet. In the crevices at their base, and on their summits, grew a few bushes, which added to their picturesque appearance. But the most singular feature about them was, that many portions of their exterior surface were as smooth and as highly polished as though they had been submitted to some artificial process. It was probably the effect of exposure for ages to the weather. A similar appearance was observed at Thorne's Wells, in the *Cornudos del Alamo*, described on our journey from San Antonio. I took a sketch of these curious rocks, which will convey a better idea of their appearance.

March 30th. Accompanied by a party of six, well armed and mounted on horses and mules, I left camp early in the morning to visit the great Waco Mountain. The mountain was about five miles distant, and the route lay through the very pass which we traversed on a former occasion. Stopped at the place where we let the carriage down by ropes, of which I took a sketch. It was one of the most grand and picturesque scenes I had witnessed on our journey up. There was much more vegetation here now, and Mr. Thurber made many additions to his collection of plants. It is in the beds of these mountain torrents or ravines, that the flora presents the greatest variety. Although the plants found here are adapted by their nature to these parched and desert regions, they nevertheless appear to seek the more secluded spots, which afford them a little protection from the scorching sun. Very few birds were descried. On reaching the great plain east of the mountain, we found several flocks of quails, of a different kind from those seen near the Rio Grande. These latter were all gray, like the northern quail; while those on the opposite side of the mountain are the blue or California quail, with a top-knot on its head. Got a few as specimens. As there was time enough to ascend to the top of the mountain, which is accessible from the east, we went around and struck the road which passes on the opposite side. This is the route taken by wagons. It is four or five miles longer; and although very hilly and tortuous, the narrow defile and perpendicular descent of the opposite route is avoided. Yet I would prefer the latter, even for loaded wagons, if the rock at the place referred to was cut away, a labor easily accomplished. After making a circuit of the mountain, and collecting some specimens of insects, reptiles, and plants, we reached our camp under the rock at 4 o'clock, P. M., well pleased with our little jaunt. The following day we returned to El Paso.

This was the only excursion I made from El Paso during the winter I was detained there, except visits on business to Doña Ana, Socorro, and San Eleazario. The Commission was as actively occupied as circumstances would permit. Lieutenant Whipple established an astronomical observatory at San Eleazario in December, and in February at Frontera, a rancho belonging to Mr. White, on the banks of the river, about eight miles above El Paso. This was intended for the permanent astronomical observatory and station, until the completion of the survey on this portion of the line.

As soon as the initial point of the boundary line, where the Rio Grande intersects the southern boundary of New Mexico, had been agreed upon by the Joint Commission, Lieutenant Whipple entered upon his duties as Chief Astronomer, to determine the position of the point on the Earth's surface, taking with him such assistants from the engineers and surveyors, etc., as he required. A second party, first under J. H. Prioleau, Esq., and subsequently under Thomas Thompson, Esq., entered the field in January, 1851, and commenced the survey of the Rio Grande at San Eleazario, which they continued up to the initial point at 32° 22′ north latitude. I also set a small party at work to make a survey of the town of El Paso and district adjacent, including the mountains, the pass, etc., embraced in a circuit of ten miles. These were all the parties I could place upon the survey, until the arrival of the chief astronomer, Brevet Lieutenant Colonel J. D. Graham, who had been appointed to that place in October last, but had not yet arrived. Consequently a large number of the engineers, with their assistants, could not be occupied; and this I greatly regretted, as the best season for field operations was now passing away.

I had given employment, for a few weeks, to John Bull, Esq., one of the first assistant engineers, with his party, in making a reconnoissance of the country between the Rio Grande and the Gila, via the Copper Mines of New Mexico, a district over part of which the boundary would run. Mr. Bull explored a new and more direct route from Doña Ana to the Copper Mines than that usually travelled; and examined the country between them and the Gila, as well as that between them and the Mexican frontier post of Janos, about one hundred and fifty miles to the south, in the State of Chihuahua.

As it was necessary, in carrying the survey westward, to establish depots of provisions at accessible points, I sent Dr. Webb to the Copper Mines, as I have before stated, to see what its advantages were, with a view, too, of making it the head-quarters of the Commission during the progress of the survey in that quarter. After an absence of three weeks, that gentleman returned and made so favorable a report, that I instructed Quarter-master Myer to remove thither with the wagons, mules, camp equipage, etc., not needed by the parties in the field. I also instructed Mr. Henry Jacobs, acting Commissary, to deposit there at the same time all the subsistence and other stores in his department. I annex a brief extract from Dr. Webb's report:—

"The result at which I have arrived is, that the Copper Mines are preferable to any other spot in this section for the establishment of a depot of provisions and other stores, and for the location of the head-quarters of the Boundary Commission; being nearer the region which must be the field of labor the ensuing season; and as both property and person will be as secure and free from predatory attacks there as they can be elsewhere, provided a suitable military guard is furnished for their protection.

"The essentials of a good situation for the purposes had in contemplation present themselves at Santa Rita (the proper name of the copper mine region), in greater number than can be found combined in any other spot within proper limits, of which we have cognizance. We find there a fine, airy, salubrious spot for dwellings, with some adobe houses (abandoned at the breaking up of the settlement on a threatened excursion of the Indians, in the fall of 1838), which, with little labor can be made tenantable; good timber, within a few miles, for building and other purposes, as also limestone and other useful materials for similar objects; a great plenty of wood near at hand for fuel; abundance of excellent grass for the animals, which will materially lessen the expense now necessarily incurred by furnishing them with grain; and a running stream, affording a supply of pure, fresh water, so essential to the comfort of both man and beast. The garrison, or fortress, that was erected for the protection of the former inhabitants of this place, is of ample dimensions to accommodate all the troops that will probably at any one time be stationed there, and can, without much difficulty, be put in good condition for the purpose; indeed, Colonel Craig is now actively engaged in directing its reparation.

"In addition, though secondary to these, I would observe, that the soil is good for agricultural and horticultural purposes; as is indicated by the remaining vestiges of the garden plats once cultivated, as well as by the rank, luxuriant growth of the peach-trees, still in bearing condition: and it is said that wild game, bears, deer, turkeys, etc., abound in the vicinity.

"The botanist, there is every reason for supposing, will, in that quarter, find a large and almost unexplored field, a suitable examination of which will undoubtedly amply repay him for all the time and labor devoted to its examination; and the collection of specimens I made, even on this flying trip, convinces me that, by proper explorations and well directed research, a geologist might make discoveries, and with the industry and perseverance that a true love of the science will inspire, might make collections, both geological and mineralogical, that will prove of interest at home and abroad, and be of permanent value to the country.

"In conclusion, I would suggest, if the decision be to remove to the Copper Mines, it is important to have the provisions, etc., sent forward with as little delay as possible, inasmuch as it will be necessary to cross the Rio del Norte at San Diego; and this stream is liable to be so greatly and so suddenly swollen in the spring, that a very little delay might render it extremely difficult and dangerous, if not impracticable, to ford it with the teams, and thus make it necessary to build boats for the transportation of the property to the opposite side of the stream."

I remained at El Paso until the 19th of April, unable to place any other parties on the line, greatly to the injury of the Commission and the interests of the Government. The whole astronomical force in the Commission was with the acting chief astronomer, Lieutenant Whipple; and I did not feel justified in sending parties to make the survey of either the Rio Grande, towards its mouth, or the Gila, until the chief astronomer, Colonel Graham, should arrive, with the other officers of the topographical corps, which had been detailed for duty on the Commission. Six months had now elapsed since his appointment, and I had received no letters to explain the cause of this delay.

The astronomers of the two Commissions having determined the position of the initial point on the Rio Grande, as before stated, I departed for the place on the 19th of April, for the purpose of signing the documents necessary to establish that point, and of attending to such ceremonies as the importance of the event seemed to demand; after which I intended to proceed at once to the new head-quarters of the Commission, at *Santa Rita del Cobre*, or the Copper Mines.

CHAPTER VIII.

EL PASO AND VALLEY OF THE RIO GRANDE.

Early colonization of Mexico—Position of El Paso—Mode of irrigation—Agricultural productions—Vegetables—Fruits—Extensive culture of the grape—Wine—Brandy—The Rio Grande—Deficiency of water—Uncertainty of crops—Houses—How built—Oriental style preserved—Primitive mode of life—Flour mills—Degeneracy of people—Dress—Settlement on the American side—Coon's Rancho—Magoffinsville—Socorro—San Eleazario—Mountain chains—Plants—Current and sinuosity of the Rio Grande.

In a work like the present, which professes to be a "personal narrative," it can hardly be expected that much space should be devoted to an historical or geographical description of the countries visited. Such digressions are important only as illustrations of the narrative, and must necessarily be limited. It was my intention to devote a chapter to these subjects, so far as they relate to New Mexico; but after looking over my materials, I find them so ample respecting the discovery and colonization of this country and the almost unexplored region between it and California, that the subject would fill half a volume if I gave it the attention it really deserved. There is no portion of the early history of this continent, whether it be that of the first establishment of the pilgrims in New England, the labors of the zealous Catholics in Canada, or the planting of the colonies in Virginia, that can vie with the extraordinary adventures and sufferings of the pioneers who first traversed the broad prairies and deserts of the central portions of our continent. Long before the consecration of Plymouth Rock, the religion of Christ had been made known to the Indians of New Mexico; the country of the buffalo was visited; the Rocky Mountains were scaled; and the Gila and Colorado Rivers, which in our day are attracting so much interest as novelties, were passed again and again by the persevering and energetic Spaniard. The broad continent, too, to cross which, with all the advantages we possess, requires a whole season, was traversed from ocean to ocean before Raleigh, or Smith, or the Pilgrim Fathers had touched our shores. The topic is too prolific to be crowded into a journal of travels; and requires much study, and a careful examination of the numerous Spanish manuscripts and early books in which the remarkable adventures alluded to are related.

The geography of New Mexico, and of the other countries visited by the Boundary Commission, is also a subject of deep interest, and requires more space than can possibly be given to it at this time. I shall therefore say no more than is necessary to make the reader familiar with the prominent features of the particular region over which he follows us, and of the towns and villages through which we pass. With this understanding, I shall give a brief account of El Paso, and the adjacent district.

The town of *El Paso del Norte* is situated on the western bank of the Rio Grande, otherwise known as the Rio Bravo del Norte, in the north-eastern corner of the State of Chihuahua. It is compactly built for the space of half a mile near the plaza; and from there it extends from five to ten miles along the rich bottom lands of the river, each house being surrounded by orchards, vineyards, and cultivated fields. The valley or bottom land is here from one to two miles in width. There were regular missionaries here before the year 1600, who traced the valley far to the north; the precise date of their permanent establishment is not known, though I think it may with some certainty be placed in 1585. At the time of the advent of the Spaniards, the Piro Indians, who occupied the valley extending as far north as Taos, had a village called Sinecu, which still exists within the space now allotted to the town; and it is quite probable that from a missionary establishment here, arose the present town of El Paso. Its name is not owing to its being the pass of the river; for that is fordable at all points, by levelling its muddy banks, except where its current is deepened by being contracted within a very narrow space. Between two and three miles above the plaza, where the river forces its way through the mountains, there is a dam, the object of which is to raise the water and divert it into the *acequias*, or irrigating canals, which conduct it through the bottom lands on both sides of the river. The principal of these canals, called the *acequia madre*, is about fifteen feet wide; from it smaller ones branch off in every direction.

As may readily be supposed, with a rich alluvial soil, and water at command, the productiveness of this valley is great. The chief cereals cultivated are wheat and maize. Oats were first planted the season I was here, and the experiment was highly successful; the yield being greater than east of the Mississippi. Potatoes do not succeed in the El Paso valley. Many attempts have been made to naturalize them by early and late planting, as well as varying the quality of water; but all have proved unavailing. It is true I have seen very good potatoes raised farther north, in the vicinity of Santa Fé; but the failures have been so numerous that they cannot be said to succeed. Onions and pumpkins are raised to a great extent, the former yielding enormously. Other vegetables are but little cultivated; which I think is more owing to the want of attention than to any fault of the soil or climate. The fruits are grapes, apples, pears, quinces, peaches, and apricots. The quinces are quite equal to our own; but the peaches lack the delicious flavor of the northern fruit, and the apples and pears are decidedly inferior. The grape is the most extensively cultivated of all fruits. It resembles the Hamburgh grape, though not quite as large, and is said to have been brought from Spain. There are both white and purple varieties. Large vineyards of this delicious fruit are seen within the town and the district adjacent to El Paso. The vine is never staked or trailed. It is trimmed close in the fall; and in the spring it throws out its shoots from the very stump, near which hangs the fruit. Each vine is kept separate, and the earth around freed from weeds. Careful cultivators cover the vines during the winter with straw. With the first opening of spring the vineyards are irrigated, or rather inundated; for the water is suffered to flow over them, and there to remain until the ground is thoroughly saturated. This is generally all the water they get. In July, the grapes come to maturity, and last full three months. As may be supposed from the abundance of this fruit, it is exceedingly cheap, and forms a large portion of the food of the inhabitants during the season.

In order to extract the juice of the grapes, they are thrown into large vats, and trodden by the naked feet of men; after which they are put into bags or sacks of raw ox-hide and pressed. The wine of El Paso enjoys a higher reputation in certain parts of the United States than it deserves. I have drank little that was above mediocrity; and it served me as it does most others who are not used to it, causing a severe headache. But I have no doubt that with proper attention a superior quality of wine may be produced here; and such is the opinion of those familiar with grape countries, who have tasted the El Paso wine. Brandy, or *aguardiente*, is also made from the grape. It is of a light color, and is known in New Mexico as "Pass Whiskey." Both the wine and brandy are transported to various parts of New Mexico and Chihuahua; and some even finds its way to Durango.

The Rio Grande valley near El Paso, and generally in other places, is thickly timbered with cotton-wood. The trees sometimes grow to a large size. Mezquit is found on the borders between the plateau and the valley; on the plateau itself it appears in a shrubby state. Cotton-wood and the roots of the mezquit constitute the fuel of the country.

The river near the town varies in width from 300 to 600 feet. It is muddy and sluggish except during freshets. In no place, between its source above Santa Fé and its mouth, is it spanned by a single bridge. It is easily forded at El Paso, and probably for two thirds its length, the greatest depth of the water where it is crossed being only from two to three feet. Still, there are places, even near El Paso, where it is much deeper. The ford changes more or less every season. In some places there are quicksands; in which wagons sink so deep, that they are extricated with the greatest difficulty, and are sometimes lost. The freshets that take place are owing to the melting of the snows in the Rocky Mountains. These are not of yearly occurrence; for during the summers of 1851 and '52, there were none. The river not only did not swell or overflow its banks, but in the former year it became quite dry near El Paso, all the water being transferred to the acequias.

A mistaken idea prevails in regard to the great advantage of artificial irrigation over that of natural rains. It is true that where the cultivator can depend upon an ample supply of water at all seasons in the irrigating canals, he possesses an advantage over him who relies exclusively on nature. But the misfortune is, that when water is most needed, the supply is the scantiest. In February and March there is always enough for the first irrigation. In April and May the quantity is much diminished; and if the rise, expected to take place the middle of May, fails, there is not enough to irrigate properly all the fields prepared for it. The consequence is, a partial failure of the crop.

In 1851 many large tracts of land near El Paso, which were planted in the spring, and through which irrigating canals were dug at a great cost, produced nothing; and I was told by a gentleman at San Eleazario, twenty-five miles below El Paso, that the summer of 1852 was the first one in five years when there had been sufficient to irrigate all the lands of that vicinity which had been put under cultivation. The value of lands dependent on artificial irrigation is much lessened when this fact is known.

Much has been said of the great value of the Mesilla valley on the Mexican bank, some thirty or forty miles above El Paso. We have a similar valley on our side of the Rio Grande, as well situated and equally productive. We have besides more than two thousand miles of this river bottom, between the source of the Rio Grande and its mouth. Where the hills and mountains approach close to the stream, there is of course little or no bottom land; while at other places, it varies from a hundred yards to four miles in width. But of this fertile land not one tenth part can ever be regularly and successfully cultivated, owing to the uncertainty of the supply of water. The Rio Grande receives no tributary for more than four hundred miles, reckoning above and below El Paso; and if there is now found to be not water enough even for the limited district near that town, what is to be done with the vast tract along the river below in a time of scarcity?

The houses at El Paso are all of one story, and built of *adobe*, i. e. the mud of the valley formed into bricks from twelve to eighteen inches long, and four inches thick, and baked in the sun. This material, with slight repairs, will endure for centuries. Sometimes chopped straw and gravel are mixed with it, which greatly improves its quality. The houses of the better classes are large, and built in the form of a hollow square. The walls are from two to three feet in thickness, and have but few openings. When plastered and whitewashed they look very neat, and make comfortable dwellings. All the floors are laid with mud, concrete, or brick. Such a thing as a wooden floor is unknown in the country. This mode of building, as well as the material, is precisely that adopted by the ancient Assyrians, and practised at the present day on the banks of the Euphrates and the Nile. From the

Church and Plaza, El Paso.

East the style was introduced into Spain by the Moors, and by the Spaniards was taken to Mexico. Moorish capitals and ornaments are still visible both in the fine dwelling and the humble cottage in northern Mexico. There is a venerable looking church here, constructed of adobe, which the cura, Ramon Ortiz, informed me had been built more than two hundred years.

Window glass is not used here. The ordinary dwellings of the poorer class have no windows. The larger ones are entered by a large gateway, and have a few barred openings on the street. The other three sides present externally an unbroken and prison-like appearance. To all other parts of the house the light is admitted through windows or doors opening on the inner area. As the period is short during which the weather requires the houses to be closed, the occupants make them sufficiently warm by covering the opening with muslin or white cotton. Fires are but little used, except for cooking; and although it is cold enough at times, the people manage to get along somehow through the winter without them.

Until the advent of the Americans after the Texan annexation and the Mexican war, the *Paseños* were a most primitive people. There was no town of any note nearer than Chihuahua, in Mexico, three hundred miles distant, and San Antonio, on the eastern side, six hundred and seventy miles off. Hence they saw few strangers, and enjoyed few of the luxuries of their civilized brethren. A *metate* stone on which to grind their corn and wheat, and a few articles of coarse pottery, constituted the utensils of the poorer classes for eating, drinking, and cooking. At present they obtain every thing that can be transported thither by wagons, though, of course, at a greatly enhanced cost. The price of labor too has doubled, and in some cases quadrupled. Day laborers (Mexican) receive five reals (sixty-two and a half cents), and find themselves. Mechanics, who are chiefly Americans, command very high wages. Carpenters and blacksmiths earn three dollars a day, and when they take jobs, much more. Corn (maize), in the winter of 1850–'51, brought from seven to eight dollars a fanega of two bushels and five eighths, although the following year it fell to five dollars.

There are now two flour mills at the falls near El Paso; one on the Mexican side, belonging to Ponce de Leon, and one on the American side, belonging to Mr. E. Hart. The latter is a fine establishment, and now supplies the United States troops here with flour. In 1850–51 flour was selling here from ten to twelve and a half cents per pound.

There are a few respectable old Spanish families at El Paso, who possess much intelligence, as well as that elegance and dignity of manner which characterized their ancestors. Among these may be found many names which are illustrious in Spanish history and literature. But there is no great middle class, as in the United States and England. A vast gulf intervenes between these Castilians and the masses, who are a mixed breed, possessing none of the virtues of their European ancestors, but all their vices, with those of the aborigines superadded. The Indian physiognomy is indelibly stamped upon them; and it requires little sagacity to discriminate between the pure and the mixed race. The latter are generally very dark, though some are seen of fairer complexion.

The upper class dress as we do. Among the inferior classes, the men wear a short jacket with large white cotton drawers, over which are drawn pantaloons, open at the outer side, from the hip down. Along this are rows of gilt buttons and other ornaments. Around the waist a red silk sash is generally worn. The whole is covered with a *serape* or blanket in cold weather. All the women wear the *reboso*—a scarf thrown over the head and around the shoulders: it is made of silk or cotton, and costs from one to thirty dollars. The most respectable ladies generally appear in the street in black, but at evening parties the richest and most gaudy articles are worn. Smoking is indulged in by all classes, and by both sexes. It is not considered proper, however, for young gentlemen or ladies to smoke before their parents. I noticed the same respect shown by all at an entertainment when the Bishop of Durango was present. After dinner cigars were brought in. Every gentleman helped himself, and retired to another room to smoke, leaving his reverence and myself alone.

El Paso, on the Mexican side of the river, which I have been describing, contains about five thousand inhabitants; but the number would be much increased by including the many ranchos and haciendas below the town, which properly appertain to it. On the American side there are but few houses; and these may be divided into three groups or settlements. The first is Coons' Rancho. This was the first settlement, and was the military post for about three years, under the command of Major Van Horne. Many of the buildings are now unoccupied.

About one and a half miles below is the principal village, which was established by James W. Magoffin, Esq., a gentleman from Missouri, and one of the oldest American settlers in the country. This place is called Magoffinsville, and was the head-quarters of the Boundary Commission while in the country. Its enterprising proprietor has erected around a large open square some of the best buildings in the country, which are now occupied as stores and warehouses. This is an admirable situation for a town, and will, no doubt, be the centre of the American settlements at El Paso.[*] An acequia now runs through the square, and the land around is of the finest quality. A mile further east is a large rancho belonging to Mr. Stevenson, around which is a cluster of smaller dwellings.

About ten miles below El Paso is an island some twenty miles in length; it is one of the most fertile spots in the whole valley, and has been cultivated since the first settlement of the country. On this island, which belongs to the United States, are the towns of Isleta, Socorro, and San Eleazario, chiefly inhabited by Mexicans. Of these San Eleazario is the larger, and was the old *Presidio* or military post on the frontier. It contains many respectable Spanish families, and some few Americans. It is now the seat of the county courts. The church and presidio are in a ruined state; they were, nevertheless, occupied by our troops for a couple of years after the Mexican war.

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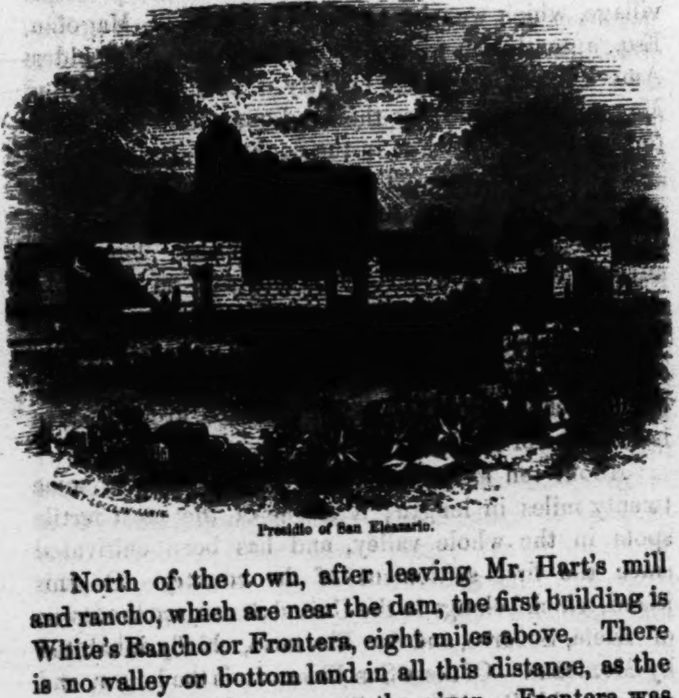
[*] The exact position of the centre of this plaza or square, as determined by Lieut. Whipple, is 31° 46′ 05″, 5 north latitude, and 7° 5′ 24″ longitude west from Greenwich. The distance due south to the centre of the channel of the Rio Grande is 2,226 feet.



Presidio of San Eleazario.

North of the town, after leaving Mr. Hart's mill and rancho, which are near the dam, the first building is White's Rancho or Frontera, eight miles above. There is no valley or bottom land in all this distance, as the mountain chain here crosses the river. Frontera was used as an astronomical observatory by the Commission during its operations in this district. Soon after we gave it up it was destroyed by the Apaches. It has nothing as a position to recommend it. Above this point the valley remains in its natural state. Some lands were ploughed and sown in 1851; but the water failed, and with it the crops. At Fort Fillmore, about forty miles above El Paso, is the next settlement. Between this and Frontera there is a broad alluvial bottom of great richness, unsurpassed by the Mesilla valley opposite, or any portion of the valley of the Rio Grande.

The mountain chain through which the river has here worked a passage, is but a spur of a higher range, which, about two miles east of the river, rises to the height of 1,500 feet. This range extends in a northerly direction, but is not continuous. About twenty miles to the north, it gradually drops off, leaving a passage of several miles, when it again rises to a greater height, into the *Sierra de los Organos*, or Organ Mountains, so named from their numerous pinacles, which, at a distance, resemble the pipes of an organ. Both the Spaniards and the aborigines display a much better taste in the appellations given by them to mountains, and other objects of natural scenery, than is usually exhibited by our people. Their names are significant of the appearance which the mountain assumes, while ours are christened after some military officer or politician, who may have made a little noise in his day, but may have never been near the locality which bears his name. The portion near El Paso is without timber; but the Organ range, which abounds in deep gorges and ravines, is covered with heavy pine forests to its very summit. The valleys, too, and the rounded hills, which are composed of the debris, present many groves of oaks. On the opposite side of the river, arising from the spurs or lesser chain, which connect it with the range on the eastern side, is another elevated chain, much broken and very rugged. This is without timber and quite barren.

Cactaceous plants abound on these mountain sides, and on the spurs leading from them. The yucca, Spanish bayonet, mezquit, larrea, and the various plants peculiar to desert regions, and the great plateau are found here. The lower spurs and intervening valleys are, in many places, covered with grama grass. The bottom lands are not grassy, as many suppose, but are entirely bare, save in isolated spots; hence it is necessary to drive mules and cattle to these hills and valleys to feed. There are, however, some portions of the higher valley above Frontera where grazing is to be found.

The height of the valley at El Paso was found to be 3,800 feet above the level of the sea. At Doña Ana, sixty miles above, on the river bottom, 4,060 feet. At Albuquerque, about two hundred and fifty miles above El Paso, Dr. Wislizenus found the elevation to be about one thousand feet higher; and supposing the circuitous course of the river through this distance to amount to four hundred miles, the fall of its water would be on an average two and a half feet per mile. But the sinuosities bear a greater proportion than this to the distance; for, in a direct line of about thirty miles from El Paso to the initial point, surveyed by Mr. Radziminski, Principal Assistant Surveyor of the Commission, the river was found to measure a fraction less than ninety miles.

CHAPTER IX.

EL PASO TO THE COPPER MINES.

Observations on the Rio Grande, from El Paso to Doña Ana—Establishment of the Initial Point, and ceremonies connected therewith—Description of Doña Ana—Mesilla—Route to Santa Barbara—Visit to ruins—Mirage—Route to the River Mimbres—Luxuriant vegetation on its banks—"Giant of the Mimbres"—Ojo Caliente—A broken arm—Arrival at the Copper Mines—Description and history of the Mines—Value of the timber in the vicinity—Abundance of game—Scarcity of vegetables—Visit to Sonora projected.

April 19, 1851. The members of the Commission not on duty, the Quarter-master and the Commissary, with all that appertained to their departments, had already taken their departure and established themselves at the Copper Mines. Having made my arrangements to move this morning, I took leave of my friends with many regrets. I had now been at El Paso five months, and departed with the intention of reaching the shores of the Pacific before my return. A wild and barren region lay before us, destitute of inhabitants save hostile bands of Indians which roamed over the deserts or hid themselves in the fastnesses of the mountains; where water was exceedingly scarce, where there was but little sustenance for our animals, and where we could expect no assistance in case our provisions fell short.

Yet, with these prospects before us, I had every reason to believe, if the officers we were waiting for should soon present themselves, that by letting the surveying parties at once take the field in various sections of the work, we should be able to complete the survey of the line which constitutes the southern boundary of New Mexico, as well as of the River Gila to its junction with the Colorado, and return to El Paso before winter set in.

Our first stop was for an hour or two, at the astronomical observatory at Frontera; soon after leaving which, one of my mules was attacked with colic, probably from eating green grass. This delayed us for some time. Various inward remedies were resorted to, without apparent effect, when the poor creature was rolled and pounded by the merciless teamsters, until I thought there was no life in him; nevertheless, this rude treatment seemed to answer: for at length we were enabled to drive him along. We continued our journey, and encamped in the Alamos, or cotton woods, twenty-eight miles from El Paso. After leaving that town, the road winds over a wild, rugged, and hilly country, for nearly eight miles. These hills are the spurs of the mountain ranges, through which the Rio Grande forces its passage. They consist chiefly of limestone, which often appears above the surface, or projects from the hill sides. Many organic remains are here found. There is no bottom land for the entire distance; nor is there sufficient space by the river's bank even for a road or mule path: consequently the way is very difficult and tortuous until the hills are passed. The bottom land does not appear for some distance beyond the observatory or, White's Rancho. The only vegetation on this barren district, is the mezquit chapporal, the larrea Mexicana, wild sage, yucca, and Spanish bayonet. In some places, are patches of grama grass. On the immediate banks of the river, are cotton-wood trees, but none elsewhere. All Americans who visit this district, express their surprise that the Mexicans, when they came out to intercept the march of the American army, under Colonel Doniphan, did not fortify this pass, and make a stand here, instead of facing our troops on the open plain at Bracito, a few miles beyond.

A large piece of bottom land has just been ploughed up and put under cultivation, by Mr. Magoffin, about twelve miles above Frontera, the only cultivated spot between El Paso and Cruces, a distance of nearly fifty miles. The first step to be taken in bringing these lands under cultivation, is to dig a large ditch from the river some distance above, and bring the water through the land. This is always kept full, and to make it available, the surface of the water should be above the level of the ground, and supported by embankments. When it is required for irrigating purposes, the bank is opened, and the water suffered to overflow the land. The necessary canals were here dug, the ground ploughed, and the seed put in; but unfortunately (as I afterward heard), the river did not rise, the canals and ditches remained dry, no rain fell, and the whole crop failed. The place was then abandoned. Such is the uncertainty of crops in the Rio Grande Valley.

April 20th. Moved from camp at 7 o'clock, and continued our journey along the bottom. Whenever we approached the river, there were more trees, fine groves of large cotton-wood, with occasional mezquit marking the valley. The road is excellent, and continues so without any repairs, except after rains, when it becomes almost impassible. At such times, wagons pursue a course lying at a distance from the bottom, and over the edge of the gravelly plateau, which is never affected by rains. The soil of the whole valley or bottom of the Rio Grande, is not surpassed for fertility, in the world. One thing alone is lacking to render it at all times productive, namely, water. For the want of this, a large portion of this rich bottom is destitute of grass, and has but little shrubbery.

Passed the small town of Cruces, a recently established place, eight miles from Doña Ana, soon after, where we soon arrived. As the train was still several miles behind, I accepted the invitation of Captain Buford of the Dragoons, to take up my quarters with him.

April 23d. Crossed the Rio Grande to the camp of Mr. Salazar, the Astronomer of the Mexican Commission, to learn if General Condé had arrived. Afterwards rode to the neighboring hills, across which the line would pass, with the view of selecting a conspicuous spot for a monument. The bank near the river not being sufficiently elevated, I determined to place a small monument with inscriptions there, and to erect a large pyramidal one on a lofty conical-shaped hill, which itself appeared like an artificial structure at a distance. The line passed directly over this, and a monument upon it would be seen for a great distance in every direction.

April 24th. The day having arrived upon which it was agreed that the Initial Point, where the southern boundary of New Mexico intersects the Rio Grande, should be established, the documents signed, and the point marked, it seems proper that I should briefly relate the history of this important portion of my duties as Commissioner under the 5th Article of the Treaty of Guadalupe Hidalgo.

Under the date of December 3d, 1850, I spoke of the meetings of the Joint Commission, and of the difficulties that lay in the way of a speedy agreement as to the boundary between the Rio Grande and the Gila, in consequence of two gross errors in the map to which the Commissioners were confined by the treaty. It was discovered that the Rio Grande was laid down on this map, more than two degrees too far to the eastward—the river, where it is intersected by the southern boundary of New Mexico, being really in 106° 40′ west longitude, instead of 104° 40′. The other error was in the position of the town of El Paso, which appears on this map to be but seven or eight minutes below the 32d parallel, while its actual distance is thirty minutes further south. After several meetings, involving much discussion, the Joint Commission agreed to fix the Initial Point on the Rio Grande at the latitude given by the map, without any reference to its distance from El Paso; and to extend it westward from that point three degrees, without reference to where the line so prolonged should terminate. This being agreed upon, the acting Chief Astronomer, Lieutenant A. W. Whipple, on the part of the United States, and Don José Salazar, the Chief Astronomer on the part of Mexico, were directed to "measure, according to Disturnell's Map, edition of 1847, the distance between latitude 32° and the point where the Rio Grande strikes the Southern Boundary of New Mexico; and also the length of the Southern Boundary line of New Mexico from that point to its extreme western termination," and to report the result of their examinations to the Commissioners at the earliest period practicable.

At the meeting of the Commission held on the 25th day of December, the following report was presented:

"In accordance with resolutions passed on the 20th instant, at an official meeting of the United States and Mexican Boundary Commissioners, we, the undersigned, have this day met for the purpose therein indicated.

"With a certified copy of the Treaty Map before us, we proceeded to make a scale of minutes of latitude, by dividing into 120 equal parts, the length of that portion of a meridian laid down upon the map between the parallels of 32° and 34° of north latitude.

"In a similar manner we found a scale of minutes of longitude for that degree of latitude, which passes through points of the Southern Boundary of New Mexico, as indicated upon the same map.

"Then measuring the distance from the point where the middle of the Rio Grande strikes the Southern Boundary of New Mexico, south to the parallel of latitude marked 32°, and applying it to our scale of minutes of latitude, we found the length equal to 22′ of arc. This reduced by Francœur's tables, is equal to 40,659 metres — 25¼ English miles — 2192 Geographical miles.

"Finally, taking the distance from the point aforesaid to the extreme Western limit of the Southern Boundary of New Mexico, and applying this distance to our scale of minutes of arc in longitude, we found it to be 3°; which in this latitude, according to tables of Francœur is equal to 2822202 metres — 17528 English miles — 15414 Geographical miles.

"Therefore, according to this determination, the point where the middle of the Rio Grande strikes the Southern Boundary of New Mexico, is 22′ of arc north of the parallel of latitude marked 32° upon the map. From the same point thence the Southern Boundary of New Mexico extends 3° to its Western termination.

"Signed, A. W. WHIPPLE,
"Lieut. U. S. Topographical Engineers,
JOSE SALAZAR
Y LARREGUI.

"Paso del Norte, December 23d, 1850."

The Astronomers were now directed to determine the point referred to by astronomical observation; and as soon as the weather permitted, they entered on the performance of their duties. On the 10th of April, Lieut. Whipple informed me that Mr. Salazar and himself had agreed upon a point on the Rio Grande, the result of nearly five hundred observations on eleven stars, which they recommended to the Joint Commission, to be adopted as the boundary point, at 32° 22′ north latitude.

The Joint Commission therefore met at the place referred to, to "establish the point where (according to the fifth Article of the Treaty), in the Boundary between the two Republics, the Rio Bravo or Grande, strikes the Southern Boundary of New Mexico." At this time the Surveyor, Mr. A. B. Gray, had not arrived, although fourteen months since the time of the adjournment in California, and five months after the time agreed upon for the meeting at El Paso. I then proposed to General Condé the Mexican Commissioner, that Lieutenant Whipple should officiate as Principal Surveyor until the arrival of Mr. Gray. To this arrangement General Condé signified his assent; whereupon I addressed the following note to Lieutenant Whipple, whose camp was then near mine.

"In Camp, near the Initial Point,
April 28, 1851.

"Dear Sir: The fifth Article of the Treaty of Guadalupe Hidalgo, requires that the two Governments shall each appoint a Commissioner and a Surveyor, to run and mark the boundary line between the two Republics.

"The Surveyor in behalf of the United States has not arrived; and having received no advice from him, it is impossible to conjecture when he will be here. The present is the most propitious period of the year for field duty; every thing is in readiness for continuing the operations connected with the survey, and the Mexican Commissioner is urgent to have the business proceeded with.

"Under these circumstances, being unwilling that any blame should attach to the United States, by a delay in the proceedings of the Joint Commission, I have thought proper, by and with the consent of the Mexican Commissioner, to designate you to act as Surveyor during the temporary absence of A. B. Gray, Esq. You are therefore requested to be present at the spot fixed upon for the Initial Point, to take part in the ceremonies as acting Surveyor.

"I am very respectfully,
"Your obedient servant,
"JOHN R. BARTLETT,
"*Commissioner U. S. Mexican Boundary Survey.*"

"To Lieut. A. W. Whipple, Topog. Engineers,
"**Acting Chief Astronomer, U. S. B. Com'n.**
"**In Camp, near Initial Point, New Mexico.**"

Lieutenant Whipple immediately complied with my request, and the Commission proceeded to the place which had been designated by the Astronomers as the Initial Point on the Rio Grande, escorted by Captain Buford of the 1st Dragoons, with his company.

We found General Condé with the Mexican Commission, the civil authorities of El Paso, and a body of Lancers already on the ground awaiting our arrival. The Joint Commission then held a meeting to agree upon the order of ceremonies to be observed on the occasion; after which we assembled around the spot which was to be marked, where a post had been planted, and a small excavation made. The document, of which the following is a copy, confirmatory of these proceedings, was read aloud in English and in Spanish, by the Secretaries, after which it was signed by the Commissioners and Surveyors of the two Commissions, and witnessed by the Secretaries and other individuals who had been invited to be present for the purpose. It was then placed in a bottle, with a list of the members of the Commission, and a fragment of the Washington Monument, and was sealed up and deposited at the place designated.

COPY OF DOCUMENT.

"Be it remembered, that on the twenty-fourth day of April, in the year of our Lord, one thousand eight hundred and fifty-one, the Commissioners and Surveyors, on behalf of the United States and of Mexico, named to run the Boundary Line between the two Republics in conformity with the Treaty of Peace, dated at the city of Guadalupe Hidalgo, on the second day of February, one thousand eight hundred and forty-eight, and exchanged at the city of Queretaro, on the thirteenth day of May of the same year, being fully satisfied with the operations made, and the results obtained, by the Chief Astronomers of the two Commissions, do establish this point, on the right bank of the River Bravo, or Grande del Norte, in 32° 22′ north latitude, which in accordance with the provisions of the fifth Article of said Treaty, is 'the point where it [the said river Bravo or Grande del Norte] strikes the Southern Boundary of New Mexico'

"Be it likewise remembered that the distance from this point to the centre of the bed where now actually runs the River, in the direction of the same parallel, is (219^{m} 4) two hundred and nineteen metres, and four tenths, following the line east from said point.

"For the greater solemnity of this act, appear as witnesses, on the part of the United States, Captain Abraham Buford, of the First Dragoons, and Colonel Charles A. Hoppin, Aid-de-Camp to His Excellency James L. Calhoun, Governor of New Mexico: And on the part of Mexico, Mr. B. Juan José Sanchez, Political Chief of the Canton of Bravos, in the State of Chihuahua, as first authority of that place.

"Written in duplicate, in English and Spanish, and sealed, at the point established, on the day of the month and year aforesaid.

"Pedro Garcia Conde, *Commissioner.*
"John Russell Bartlett, *Commissioner.*
"Jose Salazar Y Larregui, *Surveyor.*
"A. W. Whipple, *Topog. Engr. Surveyor and Astronomer.*"

"Signed in presence of
"Thomas H. Webb, *Secretary.*
"Juan Jose Sanchez.
"Francisco Jimenez, *Secretary.*
"A. Buford, *Bvt. Capt. 1st Dragoons.*
"Charles A. Hoppin, *Aid-de-Camp to Governor Calhoun of New Mexico.*"

Immediately after the Initial Point had thus been established, a plan was submitted by the Chief Astronomers and Surveyors of the two Commissions to carry on the work and mark the line. This was accepted; parties were at once organized, and the survey was commenced two days after.

I have thought it proper, in this my personal narrative, to relate briefly the principal events which constituted the main objects of the Commission, and, in so doing, to give the particulars connected with the establishment of the initial point on the Rio Grande and the southern boundary of New Mexico. In so doing I have spoken merely of the mode of determining this boundary, without, in any manner, going into the argument as to its conformity with the treaty. My readers can be the judges of this. My defence of the point and line established, with the argument of Mr. Gray in opposition to them, was presented to the Hon. Alexander H. H. Stuart, Secretary of the Interior, on the 7th of February, 1853, on my return from the Survey, and ordered by the Senate to be printed. This forms Senate Executive Document No. 41. 32d Congress, 2d Session.

After the establishment of this important point, I immediately made known the particulars connected with it to the Honorable Secretary of the Interior. (See my despatch, No. 15, Senate Document No. 119. 32d Congress, 1st Session, p. 406, which I append.)[*]

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[*] (*J. R. Bartlett to Mr. Secretary Stuart.*)

MEXICAN BOUNDARY COMMISSION,
SAN RITA DEL COBRE NEW MEXICO,
[No. 15.] May 10th, 1851.

SIR: In my last dispatch, bearing date the 14th ultimo, I had the honor of advising you of the movements of Acting Chief Astronomer

In order to show the views of the government with respect to my proceedings, particularly with reference to the appointment of Lieutenant Whipple as Surveyor

Lieutenant A. W. Whipple, preliminary to the establishment of the initial point of the boundary line on the Rio Grande.

The Chief Astronomers of the two Commissions having mutually agreed upon and advised the Commissioners of the spot where, according to the results of their united observations, the point should be fixed, the joint Commission met at the place on the 24th ultimo, for the purpose of examining and ratifying the proceedings of said astronomers, should they be satisfied with regard to their accuracy.

According to the treaty of Guadalupe Hidalgo, the presence of the Chief Surveyors is required on this occasion. The absence of Mr. A. B. Gray placed me in a very delicate position, which was rendered still more perplexing by the fact that the same treaty distinctly declares that the Chief Surveyor (no less than the Commissioner) shall be appointed by the government; and no provisions are made for contingencies like the present one; nor have I been clothed with power to appoint an individual to act temporarily as Surveyor. The difficulty was stated to the Mexican Commissioner, who, in reply, observed, that all the necessary arrangements on his part had been made to go forward with the survey at once, and he trusted that it would be proceeded with accordingly. Being unwilling that any obstacles in my power to remove should impede the progress of this important business, I did not hesitate to make known my readiness to assume the responsibility of designating some one to act in the room of Mr. Gray for the time being, provided the Mexican Commissioner, in behalf of his government, would consent to the course, and thus prevent or obviate any supposed cause of complaint by that Republic hereafter. General Condé assenting to the proposition, I designated Lieutenant A. W. Whipple as Acting Chief Surveyor.

The Commissioner and Surveyor having visited the spot, designated and examined the observations made, conferred together, and being satisfied with the proceedings of the astronomers, ratified their decision, and announced in the presence of the assemblage collected on the occasion, that they then and there established the Initial Point of that *ad interim*, and that the work should not be delayed in consequence of Mr. Gray's absence, I also append a copy of a letter addressed by Mr. Secretary Stuart to the Honorable Daniel Webster on this subject.*

portion of the boundary between the United States and the Republic of Mexico, which at 32° 22′ north latitude, is to run westward 3° along the whole southern boundary of New Mexico.

And as a further evidence of the decision made, and arguments entered into by the authorities representing and acting in behalf of the two Republics, they then deposited at the spot whereon the initial point monument is to be erected, a glass vessel containing a copy, in Spanish and English, of the accompanying document, duly signed, sealed, and witnessed.

I have the honor to be
Your most obedient servant,
JOHN R. BARTLETT,
Commissioner.

To the Hon. Alex. H. H. Stuart,
Secretary of the Interior,
Washington.

*(*Letter from the Hon. Alex. H.H. Stuart to the Hon. Daniel Webster.*)

Department of the Interior,
February 11, 1852.

Sir: I have the honor to acknowledge the receipt of your letter of the 2d instant, referring to this Department, a communication addressed to you in January, 1852, by José Gonzales de la Vega, Chargé d'Affaires *ad interim* of the Republic of Mexico, and complaining of the delays which have occurred in the progress of the work connected with the Mexican Boundary Survey. In reply to the communication of M. de la Vega, I have to state, that while it is to be regretted that any delay has occurred in the vigorous prosecution of the survey of the boundary between the two Republics, every thing has been done by this Department with the view to a prompt, energetic, and harmonious action on the part of the officers of the respective governments, in order that the

Doña Ana is a small town of five or six hundred inhabitants, and stands upon a spur of the plateau, fifty or sixty feet above the bottom lands, thereby commanding a wide prospect of the adjacent country.

important work upon which they are engaged may be completed without unnecessary interruption.

In reference to the appointment of Lieutenant Whipple as Surveyor *ad interim* on the part of the United States, to which M. de la Vega refers, I will remark, that this appointment was necessary on account of the protracted and dangerous illness of Mr. A. B. Gray, the Surveyor. Lieutenant Whipple was recognized by this government as Surveyor *ad interim*, and his official acts in that capacity were, by directions from this Department to Mr. Gray, to be considered as binding on the latter officer, who was instructed to perfect, by his signature, any documents prepared requiring it.

The Department relieved Lieutenant Colonel Graham from duty as Chief Astronomer of the Commission, and Lieutenant Colonel William H. Emory was appointed to succeed him; and as the interests of this government seemed to require a diminution in the number of officers on the part of the United States, to prevent, as far as practicable, unnecessary interruption in the progress of the Survey, and to place the organization of the American Commission on a permanent footing, the President also appointed Lieutenant Colonel Emory the Surveyor on the part of the United States, under the 5th article of the Treaty of Guadalupe Hidalgo, in the place of A. B. Gray, Esq., with instructions to proceed at once to the scene of operations, and report to the Joint Commission.

It is hoped that the Joint Commission will now proceed without interruption to the close of their operations on the Survey, and that nothing will transpire on either side to cause any delay in the early settlement of the boundaries between the two Republics.

I am, Sir, &c.,

ALEX. H. H. STUART,

Secretary.

HON. DANIEL WEBSTER,

Secretary of State.

[Senate Ex. Document 119. 32d Congress, 1st Session, p. 124.]

It has been settled but a few years, and was selected on account of the broad and rich valley near, and the facilities that existed for irrigating it. Its houses are mostly of a class called *jacals*, i. e. built of upright sticks, their interstices filled with mud, though a better class of adobe buildings have just been erected along the main street, for the occupation of the military, and for places of business. The central position of Doña Ana, and its fine lands, led to its selection for a military post. At the time of my visit there were two companies of United States troops here under the command of Major Shepard.

Six or eight miles below Doña Ana, on the opposite side of the river, is the town of *Mesilla*, containing between six and seven hundred inhabitants,* a place which owes its origin to circumstances growing out of the late war with Mexico. These circumstances it may be proper to relate, as well as the origin of its name.

Mesilla is the diminutive of the Spanish word *mesa*, *i. e.*, table, also table-land, or plateau, and is applied to a lesser plateau in the valley of the Rio Grande, beneath that of the great *mesa* or table-land, which extends for several hundred miles in all directions from the Rio Grande. It is situated on the western side of the Rio Grande, about fifty miles above El Paso, in latitude about 32 degrees 18 minutes north, and until the year 1850 it was without an inhabitant.

Immediately preceding, and after the war with

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* This was the population in March, 1851, as stated to me by the authorities of El Paso.

Mexico, the Mexican population occupying the eastern bank of the Rio Grande in Texas and New Mexico were greatly annoyed by the encroachments of the Americans, and by their determined efforts to despoil them of their landed property. This was done by the latter either settling among them, or in some instances forcibly occupying their dwellings and cultivated spots. In most cases, however, it was done by putting "Texas head-rights" on their property. These head-rights were grants issued by the State of Texas, generally embracing 640 acres, or a mile square, though they sometimes covered very large tracts. They were issued to persons who had served in her wars, like our military land warrants, and also to original settlers. Such certificates are still bought and sold in Texas. The owner of them may locate his land where he pleases, unless previously occupied, or in lawful possession of another.

With these land certificates, or "head-rights," many Americans flocked to the valley of the Rio Grande, and in repeated instances, located them on property which for a century had been in the quiet possession of the descendants of the old Spanish colonists. The latter, to avoid litigation, and sometimes in fear for their lives, abandoned their homes, and sought a refuge on the Mexican side of the river. Doña Ana, a modern town on the eastern bank of the Rio Grande, being a desirable place, and moreover selected by the United States for one of its military posts, became an attractive point for speculators, and was in consequence pounced upon by them, and covered by the Texan land warrants. Whether the Mexican occupants of the town and lands adjacent were the lawful owners or not it is needless to investigate; it is sufficient to say that they were the first settlers, and had long been in undisturbed possession. They now became alarmed. Litigations commenced. Some applying to the authorities of New Mexico, Texas, or the United States, for protection. Failing to obtain it, several hundred abandoned their property and homes in despair, and sought an asylum in Mexican territory, preferring the very uncertain protection they could obtain there to remaining as citizens of the United States.

With this resolution, a spot was selected on the opposite or western side of the river, six or eight miles below Doña Ana, which, it was believed, would be within the limits of Mexico. On the 1st March, 1850, sixty Mexicans, with Don Rafael Ruelas at their head, most of whom had been domiciled at Doña Ana, abandoned their homes on account of their many grievances, and moved to the lands known as the Mesilla, where they established themselves. To increase the colony, the government of Mexico offered to give lands to other actual settlers, which offer induced large numbers of dissatisfied Mexicans living in New Mexico and in the small settlements along the Rio Grande, in Texas, to remove there. More than half the population of Doña Ana removed to Mesilla within a year.

When the boundary line was established in April, 1851, and it became certain that La Mesilla was south of the boundary line, according to the treaty map, their fears were removed, and a day was set apart for public rejoicing. For the whole population had determined to abandon the place if the boundary line had run south of the village, and thus placed them under the jurisdiction of New Mexico. The day came, and the event was celebrated by firing of cannon and a grand ball, which many from El Paso attended. After this, the population continued to increase; in October, 1852, the Prefect of El Paso estimated it at 1,900 souls.

Very few Americans ever settled there—in fact, none but traders, and it is probable that there never were twenty altogether.

The lands at La Mesilla are of precisely the same character as other bottom lands, on the opposite bank of the river, near Doña Ana and Cruces; and in fact, as far as the mountain pass above the town of El Paso.

April 27. Left Doña Ana at nine 9 A. M., accompanied by all the assistants, and others attached to the Commission, except those whose aid was required by Lieutenant Whipple in the duty he was about to enter upon. My train consisted of twelve wagons, drawn by five or six mules each, and my travelling carriage with four mules. The assistants rode on horses or mules. We continued on our course towards the north, and soon struck the great *Jornada del Muerto*[*] (Deadman's Journey), on the Santa Fé road, which we followed for nine miles, when we turned off to San Diego, the old fording place. There is no village nor even a rancho here, although marked on the map as a town. A great reddish bluff, composed of a conglomerate of jasper, quite detached from the adjacent hills, lay on our left. As we descended into the valley our eyes were gratified with the sight of trees and shrubbery, and more grass than we had seen since leaving El Paso. In fording the river, one of the wagons, in consequence of diverging a little from the proper course, got into a quicksand, and was near being lost. Continued our course eight miles up the stream, and encamped at half-past 5 P. M., in a beautiful grove of cotton-woods, having made twenty-six miles. There was excellent grass here, and in great abundance. The wagons did not all get up until an hour after, in consequence of the delay at the ford. A train of wagons belonging to the Commission, in attempting to cross a few weeks after, when the water was somewhat higher, got into the quicksand. The mules in struggling to free themselves, sank deeper; and before they could be extricated, all six were drowned.

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[*] Jornada, literally, means a day's journey; but it does not seem to be used, except there is a long reach of desert country without water. It therefore is applied to one or two days' journey. The Jornada del Muerto is 90 miles across, without water, and of the most desert-like character.

April 28. Moved from camp at 7 A. M., the road continuing along the river bottom, close to a low range of gravel hills, when we diverged to the north-west. Thick groves of cotton-woods occurred at intervals, and the whole valley was more or less wooded. The young grass, and the deep foliage of the trees, were refreshing to our eyes, which for five months had gazed on little more than stunted mezquit bushes, and the thorny cactus. From the water marks on the trees, the river rises about four feet above its banks, inundating the bottom lands to the base of the hills which border them, and rendering the valley impassable. There does not seem sufficient space to carry a road over the hills, although there may be a practicable route within, which was not visible to us. At 11 o'clock we reached a new settlement on the river's bank, called Santa Barbara, where, finding excellent grass, I determined to encamp. The road had been quite sandy and rough the fourteen miles we had come, and as the next water at the mule spring was twenty miles distant, I thought it prudent to go no farther. The settlement consisted of a few *jacal* or stick houses, part of which were in the process of erection. A deep *acequia* was already opened, and large fields of wheat and corn were now undergoing the process of immersion. Acres were covered with water; and the soil is of so spongy a nature that we found it impossible to cross these overflowed places with the wagons, so deeply did the wheels sink into it. Herds of cattle and goats; half-naked Mexicans with their hoes, peons hooting and yelling as they urged on their oxen with their long-pointed poles; and the primitive wooden ploughs, turning up the virgin soil, exhibited a scene of industry, such as I had not before witnessed in the valley of the Rio Grande.

We pitched our tents in a thick grove of large cotton-woods, near which passed the *acequia;* while on the opposite side was a pond or laguna, extending a mile or more. As this body of water was not wider than the river, and presented many sinuosities, I think it must have been formerly the channel of the Rio Grande; for, like the Mississippi and other rivers which flow through an alluvial soil, it is continually changing its bed, where great bends occur. The laguna is now supplied by overflows from the river. There were many wild fowl in it; but its banks were so open, that we could not approach the game.

April 29. Hearing that there were traces of an ancient Indian settlement about half a mile distant, Dr. Webb went over to examine it, while we were getting ready to move. He found a good deal of broken pottery, all of a fine texture. Some of it bore traces of red, black, and brown colors. He also found a stone mortar about eight inches in diameter. I have since understood that this was the seat of one of the earliest Spanish missions; but it was abandoned more than a century ago, and no traces remain but a few heaps of crumbling adobes, which mark the site of its dwellings.

Our course on leaving camp, was south of west. After following the valley a couple of miles, we began to ascend a range of high hills, over and through which, the road wound for about twelve miles, before we reached the highest level. In descending, the road was hard and smooth as a turnpike, and so continued until we reached our camping ground, at the foot of the hills. To the south, at some fifty or sixty miles distant, rose a high mountain, the intervening plain presenting the most beautiful mirage I ever witnessed. It seemed like the surface of a broad lake, the mountain peaks standing detached, like so many islands rising from the bed of its placid waters. If I had not known that the region before me was a barren desert, I would certainly have been deceived.

Reached Mule Spring at one o'clock. Estimated distance travelled to-day, twenty-three miles. This spring is in an arroyo or ravine, and contains but a few barrels of water. Some ash and cotton-wood trees mark its course from the mountains where it rises. Colonel Craig, when he passed here with his command a few months before, opened the spring and sunk a barrel in it. The water is very good. In the rainy season, this arroyo is probably filled with water, as the trees and banks exhibit the marks of it.

Approach to Mule Spring. Picacho de Mimbres.

April 30th. On leaving Mule Spring, we turned nearly south, with a range of mountains on our right. This was directly out of the general course of our route, which was to the north-west; but there was no other way to pass the mountains. The road was excellent, and we traversed it rapidly, reaching Cooke's Spring, twelve miles distant, at 11 o'clock, where we stopped to water. This spring forms a pool, some fifty feet across, surrounded by rushes. The water is a little brackish, but the grass in the vicinity is excellent. Ascended a hill on the south, which was strewn with fragments of chalcedony, of which some fine specimens were collected. From this hill the Organ Mountains were plainly seen, bearing a little south of east.

After waiting an hour to let the mules have the benefit of the grass, we hitched up and passed through the cañon or mountain defile, in a south-westerly direction, for three miles. This pass was quite hilly and stony, with some steep ravines to cross, but otherwise attended with no difficulties for wagons. After passing these mountains, our course was north-west for eight miles, when we reached the summit of a high table-land that lay before us. Here a wide view opened. The east was bounded by the long range of mountains which we had followed on the opposite side and crossed in the morning, while on the west, the broad undulating prairie was only here and there interrupted by low conical-shaped hills. At the south and south-west, detached mountains appeared abruptly springing from the plain, with jagged and picturesque summits, some of which must have been fifteen hundred feet in height. In the clear blue atmosphere of this elevated plateau, every object appeared with great distinctness, so that mountains could be seen at a distance of more than a hundred miles.

From the plateau we were traversing, we could discern, far in the distance, a streak of dark green, resembling a huge serpent. Far as the eye could reach, this dark streak wound its way, now expanding into the plain, and again contracting its dimensions among the hills, until it finally lost itself in a high range of mountains to the north. This was the long-talked-of River Mimbres, the third stream we had seen since passing the small water-courses which empty into the Colorado, in our journey from San Antonio to El Paso, the Pecos and the Rio Grande being the other two. As we were now on the descent, with a smooth road, my mules dashed off at full speed in advance of the train, followed by the young men on horseback; for all were pretty well tired of the desert, and longed to feast their eyes on running water again; and the ten miles which separated us from the bank above the valley were soon passed over.

When we reached the verge of the hills which bound the valley of the river, a sight truly refreshing presented itself. The bottom for nearly a mile in width was covered with verdure, such as we had not seen since leaving the rich valleys near Fredericksburg, in Texas. As we rode rapidly forward, we noticed a herd of about twenty black-tailed deer quietly grazing on the luxuriant grass of the valley. Disturbed in their solitude by the rattling of the carriage and the tramping of the horsemen, they dashed away over the plain in single file, led by a large buck. We traced their course for some distance, as they bounded over the hills, until lost in the mountain ravines. Nearer the river, other deer of the same species were seen browsing upon the willows, which, in like manner, darted off at our approach.

We pitched our tents beneath a grove of cottonwood trees, at a short distance from the river, when all hastened to taste its waters, and plunge into its cool depths. Great was our disappointment, after the anticipations we had indulged in, at finding nothing but a diminutive stream from ten to twenty feet in width, and in some places even less, which, east of the Mississippi, would hardly be designated with the name of "creek." Nevertheless, it was welcomed by us as heartily as the Ohio or Hudson would be by travellers in more favored regions; for it answered all our wants. Its water was soft and delightful to the taste, surpassing that of the Rio Grande. This stream has never been traced to either of its terminations. It rises in the mountains north-east of the Copper Mines, and when full, empties into Lake Guzman, about one hundred and thirty miles to the south; but for several months in the year it exists only in pools, or dries up entirely after reaching the plains. When the surveying parties crossed it six weeks later, about fifteen miles lower down, they found it entirely dry. Another feature, which is common to other streams in Mexico, was noticed in the Mimbres, namely, its sudden disappearance or sinking into the desert, and its re-appearance some distance beyond.

May 1st. In camp on the Mimbres. As our animals had been poorly fed since leaving El Paso, I determined to remain here to-day to give them the benefit of the fine young grass. All the party seemed to enjoy the relaxation; and they sallied out after breakfast, some in search of game, others of the picturesque. For my part, I took the two together; for when I went to the hills in search of game I carried my sketch book with me, as it was only among the wooded hills, the defiles, and the thick groves along the river bottom, that game was to be found; and there, too, was the most picturesque landscape scenery, and the best field for the exercise of my pencil.

I first walked down the stream about two miles to a thick grove of large cotton-woods. The bottom was much contracted here; nevertheless, it was thickly wooded and forest-like. Ash and oaks were interspersed among the cotton-woods. Saw many signs of turkeys, but shot none myself. Some of the party were more fortunate and brought in several. About five miles north of our camp the river enters the hills, and a little further up, is closely hemmed in by lofty mountains. Noticed wild roses in great profusion, also wild hops, and the Missouri currant. These, in some portions of the valley, were so closely entangled together that it was impossible for one to work his way through. Found several old Indian encampments, with their wigwams standing, and about them fragments of pottery. Many well-marked Indian trails followed the river on both sides, showing that it had been, and probably is now, a great thoroughfare and place of resort for the Apaches.

In the afternoon, Mr. Bausman, one of our most indefatigable sportsmen, came in from a hunt, and reported that he had seen some remarkable rocks about five miles up the river, to the north of our camp, which were worth visiting. I immediately had my mule saddled, buckled on my pistols, attached my rifle to the pummel of the saddle, and taking my sketch book, accompanied him to the place referred to, which was about half a mile from the river on the western side.

Arriving at the place, I found some singular masses of sandstone standing detached from the adjacent hills, one of them bearing a curious resemblance to a man. My timid mule was much alarmed at the gigantic object which stood before it, trembling from head to foot. We therefore stopped a short distance from it and hitched our animals to an oak which hid from view the source of their terror. Around us stood these singular isolated rocks, some appearing like castles, others like single pedestals and columns. The one resembling a human figure, which is shown in the accompanying sketch, and which I christened the "Giant of the Mimbres," measured but three feet in its narrowest part near the ground; while its upper portion must have been at least twelve feet through, and its height about fifty. Others of equal height stood near. All are disintegrated near the earth, and

Sandstone rocks. Rio Mimbres.

are gradually crumbling away, several having already fallen. When I had completed my sketch, we mounted our mules, and hastened back to camp, which we did not reach until some time after dark, my long absence meanwhile causing much uneasiness. Several turkeys were seen during our ride, and a couple shot. A number of fish of the trout species were taken here.

May 2d. Crossed the Mimbres, and soon after reached the level of the table-land, gradually ascending toward the high mountainous region wherein the Copper Mines are situated. Having heard of the *Ojo caliente*, a remarkable hot spring two miles from the road, I determined to visit it, and accordingly struck off the wagon road, accompanied by all who were mounted. A ride of three or four miles brought us to the spot. This spring lies within a crater-like opening, twenty feet in diameter, on the top of a mound of tufa about six hundred feet in circumference at its base, and about thirty feet high, all of which seems to consist of the deposits made by its waters. The temperature of the water was 125° Fahrenheit. Its surface was some six or seven feet below the rim of the basin; and its depth I judged to be about the same. Dr. Webb collected the gas which bubbled up from the bottom, and found it to be neither hydrogen nor carbonic acid gas. He consequently judged it to be atmospheric air. The water was not unpleasant to the taste, and would be palatable if cooled: Lower down, upon one side of the hill, a small spring burst out, and at a short distance, where it collected in a pool, the water was cool enough to bathe in; but even there I found it literally a hot bath. Mr. Thurber discovered fresh water plants [algæ] and insects flourishing in water at this elevated temperature.

Just at the base of the hillock where the water accumulates, is a cotton-wood tree and a few bushes, where I hitched my mule before going up to the spring. On returning to take her, I had loosened the lariat, and was in the act of mounting, when the mule took fright at something and rushed into the bushes. I either fell or was dragged off, and at the same time, the malicious beast struck out her hind legs, and hit me on my left shoulder. Several rushed to my aid, and my left arm was found to be injured. After lying upon the ground a short time, I managed, with assistance, to walk about two miles to the road, where my carriage took me up. We were now about eighteen miles from the Copper Mines, and the jolting of the carriage pained me exceedingly; but as no relief could be got until we reached there, I pushed on as fast as possible. We reached the Copper Mines at 3 o'clock, P. M. Colonel Craig gave me a warm welcome, and took me at once to his quarters, when I immediately retired to my cot.

The following day my arm was examined by Doctors Bigelow and Webb of the Commission, and Dr. White of the army, who decided that there was a fracture near the shoulder. The arm was much swollen and discolored

I remained an invalid, confined to my cot or chair for two weeks, taking a little air towards the end of the second week. During this time my excellent and lamented friend, Colonel Craig, paid me great attention. He watched me with the care of a mother, getting up frequently at night to turn me in my bed, which for the first week I was unable to accomplish without assistance. This he preferred doing to my having a servant in the room with us.

May 5th. General Condé, with the Mexican Commission, arrived to-day. After remaining three days, he removed his camp to the banks of the Mimbres, where he believed he would find sufficient grass for his animals.

Santa Rita del Cobre, as this place is called by the Mexicans, was for about forty years an active mining town. The workings were commenced in the year 1804, and proving very profitable, a population of about 600 souls gathered around them in the small open space which here exists encircled by lofty mountains. The valley is so narrow here, as to afford

Valley of the Copper Mines from the South.

only a plot of about a couple of acres for cultivation, and that seems to have been used as a garden. The hills around furnish excellent grazing for any number of animals; but for agricultural productions, the population depended upon the cultivated districts at the south, in the valley of the San Miguel or Casas Grandes, from which they received regular supplies of corn, flour, beans and other articles of subsistence. These provisions and merchandise were taken to the mines by large trains of wagons, either on private account or on account of the establishment. There was also a considerable trade carried on with the frontier towns in Sonora. The nearest settlement was the Presidio of Janos, a frontier military post on the San Miguel river, 150 miles off; though the trains with their chief supplies were sent from the city of Chihuahua, situated at a distance of 400 miles. The return trains took back copper ore: this was afterwards sent to the city of Mexico, where, owing to the superior quality of the metal, it was used chiefly for coinage. It is said that the owner had a contract with government to deliver the copper there at 65 cents a pound, and that sufficient gold was found in it to pay all the cost of transportation. I do not doubt the truth of this statement, as Mr. Courcier, who first worked the mine to advantage, amassed a large fortune from it, and Mr. McKnight, his successor, also found it very profitable. In 1838, a large train from Chihuahua, with supplies, was attacked and overcome by the Apaches in the cañon leading to the mines. Such of the contents of the wagons as the savages wanted they took, as well as the mules and horses, first giving each man who accompanied the train a mule to carry him away. At the same time they sent word to the inhabitants at the Copper Mines, that they would allow no further supplies to reach them, and, furthermore, would destroy them whenever an opportunity offered. Thus cut off from the means of support, and surrounded by large warlike tribes, the people determined to abandon the place. It had consequently remained unoccupied ever since, until taken possession of by the Boundary Commission in the present year, 1851.

Several deep shafts were sunk by the Mexicans in the adjoining hills; which, with the vast heaps and extensive excavations about them, show that an immense deal of labor has been performed here. One of the largest shafts has been filled up in consequence of the earth's caving in; as I was told by a Mexican in the employ of the Commission, who said he had lived here when the mines were worked. Others are obstructed by water, which has accumulated near their entrances. Some of the excavations are still accessible, and have been explored by many. If it should again become an object to work the mines, they might be cleared without much labor. The rock is mostly felspar, and the red oxide of copper, intermixed with native metal. Large quantities of ore are deposited near the smelting-house.

On entering these excavations, one sees the bright veins of the sulphuret of copper penetrating the rock in all directions, with here and there small masses of native copper; and it is evident that all the hills in the vicinity are quite as rich as those which have been opened, for the same indications appear on the surface.

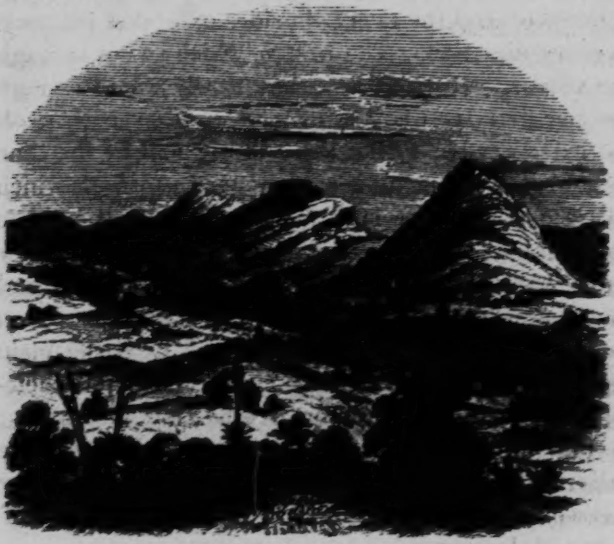
But until there is some other mode of transporting the copper to market, than by wagons for a distance of nearly a thousand miles, it will hardly pay to work them. There is no longer a market in the city of Mexico, as other mines have been found much nearer. It now costs twenty cents a pound to transport goods from the coast at Indianola; but as the wagons go down empty, the owners would, no doubt, be glad to carry the copper at half price. Labor is cheap and abundant in Mexico. At El Paso, Mexican laborers could be had for 62½ cents a day, they finding themselves; but men could doubtless be procured at even a less price. They require only the most simple food; flour, beans, and a very little meat will satisfy their wants.

The district about the Copper Mines might be made to produce all the food needed for a mining population. There is no valley or arable land close to the mines; but eight miles to the eastward the Mimbres winds its way through the mountains, and has in many places a broad valley or bottom, which could be easily irrigated, and made to produce large crops. Hither we sent our cattle and mules, and in the driest time found an abundance of grass and water. Within two or three miles there are fine valleys, where, I doubt not, corn might be grown without irrigation, as is the case in some of the mountainous districts of Mexico; for it often rains here, when the plains below, but ten or fifteen miles distant, are parched with drought. We were not prepared to try the experiment; but, from the appearance of the soil, the richness of the grass, and general exuberance of the vegetation, together with the moisture which prevails in such mountainous regions, I have no doubt the experiment would be successful.

We reached this district on the 2d of May. Vegetation was then forward, though there had been no rain. But it must be remembered that during the winter there is snow, and hence a good deal of moisture in the earth when the spring opens. The months of May and June were moderately warm. On the third of July the first rain fell. It then came in torrents, accompanied by hail, and lasted three or four hours. Many of our adobe houses were deluged with water, and the mountain sides exhibited cataracts in every direction. The *arroyo*, which passes through the village, and which furnishes barely water enough for our party and the animals, became so much swollen as to render it difficult to cross; and by the time it had received the numerous mountain torrents which fall into it within a mile from our camp, it became impassable for wagons, or even mules. The dry gullies became rapid streams, five or six feet deep, and sometimes fifty feet or more across. On this day, a party in coming to the Copper Mines from the plain below, where there had been no rain, found themselves suddenly in a region overflowing with water; so that their progress was arrested, and they were obliged to wait until the flood had subsided. After this we had occasional showers, during the months of July and August.

The weather was not uncomfortably warm any day while I was here; indeed, on several occasions, directly after rains, I found a fire quite agreeable. The party

I left informed me, that early in October it became so cold that fires were necessary every day. The height of the little valley where the mines are was found to be six thousand two hundred and fifty feet above the level of the sea; and the height of the mountain, which rises abruptly from it, and to which the name of Ben Moore has been given, is eight thousand feet. This mountain is the beginning of a range of bold, rocky bluffs of trap, of a grayish hue, which extend some twenty miles to the south, and gradually drop off into the plain. On one side of this bluff, a portion of the rock is separated from the mountain, and stands detached from it like a column. This mountain is a



Cañon leading to the Copper Mines, from the South.

perfect barrier to a direct road, or even a mule path, across to Mule Spring, making a difference of thirty miles in the distance to Doña Ana. Below the mines the columnar masses crown the summit of the hills and mountains, often appearing like elevated castles. The sides of these mountains are well wooded, as are also the intervening valleys.

Gold is said to have been found here when the mines were worked; and many stories are told of large quantities that were buried when the place was abandoned. About four miles distant, a deep shaft had been sunk, where it was said a skin containing more than five thousand dollars worth of gold had been buried. Several men took their discharge here for the purpose of clearing out the shaft and getting the buried treasure. After several weeks labor, they reached the bottom, and even dug some feet below; but their search was not rewarded with success. This shaft was sunk about seventy feet below the surface. Veins of gold were found, but not sufficient to pay the cost of working; and the spot was abandoned. I saw many fine specimens of lead, and one of silver ore, which were found in the vicinity; but I did not visit the localities. The Mexicans who had formerly resided here assured me that the existence of silver was known to many at the time; but being in the very heart of the Apache country, it could not be worked. The Indian Chiefs also said they would show me where there was plenty of gold, if I would accompany them, but that they would not disclose the secret to others. I told them we did not come to their country for gold. and declined their offer. Whether they really knew of any or not (and it is my belief that they did), I thought it best not to put myself in their hands, but to maintain the position I had taken from the commencement; namely, that our object was to survey the boundary between the United States and Mexico, the meaning of which they had been made to fully comprehend.

But the great value of the Copper Mine region, which extends from the Gila eastward about fifty miles towards the Rio Grande, is in its fine forests of timber. The principal trees are two species of evergreen oaks; two cedars, one like our red cedar, the other with a berry much larger, and several pines, among them the *Pinus edulis*, or piñon pine. This bears an edible nut, which is a favorite article of food with the Indians. It is quite pleasant to the taste, but is rather small and troublesome to eat. So rich a timbered country does not exist between the Mississippi valley and the Pacific, except in the mountainous district of Upper California. Should a railway be constructed across the country south of the Gila, its timber must be procured from this quarter. The value of pine timber in this region can be appreciated when I state, that there is not a single floor made of boards or plank in the town of El Paso; nor have I ever seen one in any part of New Mexico, Chihuahua, or Sonora. In El Paso, I was obliged to purchase a few hundred feet for doors, tables, and various fittings, for which I paid one hundred and seventy-five dollars a thousand. For building purposes, therefore, this timber would prove immensely valuable.

The buildings at the Copper Mines consist of a

"Presidio" or fort, which commands the approach from the cañon below. It is of a triangular form, each side presenting a front of about 200 feet, with circular towers on the corners. It is built of adobe, with walls from three to four feet in thickness, and a single opening on the eastern side. This building was in so good a state of preservation on the arrival of Colonel Craig, that in a few weeks he built up such walls as had fallen, restored the roof, and made the whole tenantable for himself and his command, furnishing besides store-rooms for all his provisions. There were also some fifty or more adobe buildings, some of them in good preservation, except the roofs, and others in a state of complete ruin. The adobes were therefore

Presidio at the Copper Mines.

taken from those in the worst condition to complete the others, roofs were added, and comfortable habitations made for the officers of the commission.

The hills and valleys abound in wild animals and game of various kinds. The black-tail deer (*Cervus lewisii*) and the ordinary species (*C. virginianus*) are very common. On the plains below are antelopes. Bears are more numerous than in any region we have yet been in. The grizzly, black, and brown varieties are all found here; and there was scarcely a day when bear-meat was not served up at some of the messes. The grizzly and brown are the largest, some having been killed which weighed from seven to eight hundred pounds. These are dangerous animals to approach, unless there are several persons in the party well armed; and even then, it is well to have a place of retreat in case of emergency. I have known a grizzly bear to receive twelve rifle or pistol balls before he fell; though in one instance a huge animal was brought down by a single shot from a well-directed rifle, which passing though his entire length, killed him instantly. Turkeys abound in this region of a very large size. Quails too are found here; but they prefer the plains and valleys. While we remained, our men employed in herding the mules and cattle near the Mimbres, often brought us the fine trout of that stream, so that our fare might be called sumptuous in some respects. But it requires something more than meat and game to satisfy the appetite and preserve health and vigor, and we would willingly have exchanged either or all of these luxuries for a few vegetables. We had not tasted a potato for a year, nor any other vegetables except a little wild asparagus at El Paso. The want of this necessary article of food was therefore sensibly felt, and some of the men began to exhibit symptoms of scurvy. Among the members of the Commission the cases were few and the attacks slight; but the soldiers exhibited twelve or fifteen cases, since leaving the coast, some of them very bad ones. We were well provided with such anti-scorbutics as citric acid, vinegar, pickles, and dried apples; but they did not have the desired effect upon the worst cases, though they doubtless prevented the spread of the disease. Some plants were found by Mr. Thurber, which proved very palatable, and were eaten as long as they lasted with very good effect. Doctor Bigelow, the Surgeon of the Commission, addressed me a letter on the subject of the scurvy, urging upon me the necessity of procuring potatoes. In consequence of this, Colonel Craig and myself sent to Santa Fé, a distance of three hundred miles, for them; but they were not to be had there. With the exception of this disease, the best health was enjoyed by every member of the Commission, during our stay in the region of the Copper Mines. The surveying party on duty on the plain, or desert, as it may with more propriety be called, suffered more on account of the intense heat to which they were exposed, and the frequent want of water. In another respect they were badly off, as it was impossible to take fresh meat with them. My intention was to provide them with sheep, which could obtain a subsistence on the short grass of the plains or near the watering-places; but it was necessary to send to New Mexico for them, and they were not delivered in season.

Unable to send any more parties into the field, in consequence of the non-arrival of Colonel Graham, I determined to make the most of my time by visiting the frontiers of the State of Sonora. In this trip my object was fourfold, viz.:

1. To ascertain from personal examination the condition of the route known as "Cooke's road," from the Rio Grande to the Pacific, and particularly that portion of it leading to the River Gila; in order to determine whether it was practicable to transport by it the provisions needed for the parties engaged in surveying this river.

2. To learn if any, and to what extent, supplies of corn, flour, cattle, sheep, vegetables, &c., could be furnished to the Commission; and on what terms they could be delivered here, or to the engineering parties on the Gila.

3. To induce the people of that State to renew the trade formerly carried on with the Copper Mines.

4. To obtain a supply of anti-scorbutics—*i. e.*, vegetables and fruits, fresh or dry.

The protracted sojourn on the Gila, which the surveying parties must necessarily make, would require so large a supply of provisions, and the risk and expense of transportation by pack-mules would be so great, that I believe it would tend greatly to the advantage of the Commission to convey the supplies as far as possible by wagons. There is no road near the Gila along its whole course, and that point of Cooke's road where it strikes the river (midway between the Copper Mines and its junction with the Colorado) would furnish a good and central location for a dépôt of provisions.

Colonel Craig was as desirous as myself to ascertain these facts, and to do all in his power to promote the health and comfort of his men. We accordingly made arrangements to set out on this journey on Friday the 16th May, I having so far recovered as to be able to ride in my carriage, although my wounded arm was still kept in bandages and firmly fastened to my side.

THIRD DIVISION.

JOURNEYS AND INCIDENTS IN SONORA.

CHAPTER X.

THE COPPER MINES TO AGUA PRIETA.

Spring at Pachetehu—Ojo de Vaca—Janos road—Col. Cooke's road—Scarcity of water—Dry bed of a lake—Mirage—Desert region—Zoology of the plains—Guadalupe Pass—Difficulties—Bears—Discover foot-prints of deserters from Copper Mines—Sycamore trees—Cañon—Luxuriant vegetation—Descend from the great plateau—Change of climate—Ruined hacienda of San Bernardino—Wild cattle—Black Water Creek—Teamster attacked by a bull—Grave of an American deserter.

May 16*th*. The party for the journey to Sonora consisted of Colonel Craig, with two teams of six mules; Dr. Webb, Messrs. Thurber, Moss, Cremony, Steele, Bausman, Weems, Stewart and myself, also with two teams of six mules. The wagons were nearly empty, containing merely our tents, camp equipage, and provisions. All were mounted on horses or mules except myself; and I would have much preferred the same mode of travelling, but my lame arm forbade it. Even in the carriage the attempt seemed rather hazardous, not knowing what the roads were, or indeed whether such things existed at all in the interior parts of Sonora.

We did not get off until noon, as it was my intention to go only as far as the first watering-place, called *Pachetehu*,* whither I had sent the wagons in advance to await our arrival. We passed down the cañon in fine spirits, all being glad to get away from the dull monotony of a stationary camp. The country was much parched; for no rain had yet fallen. After leaving the cañon we diverged towards the right, and struck the old road leading to Janos, which had not been passed by a wagon or any train for nearly fourteen years. Yet the ruts were quite distinct on the plain. In fact, some portions of it, where the water had run, were washed out into deep gullies, rendering it impassable for teams. At three o'clock reached *Pachetehu*, a depression in the plain which, in addition to a spring, received the waters after rains. I traced the course of the waters for a couple of miles, marked by rushes and little patches of willows, when it disappeared in the plain. The grass is abundant for some fifteen or twenty rods on each side of this spring and water-course; but there is no wood. Parties must supply themselves with this before leaving the wooded district. Distance from the Copper Mines, thirteen miles.

May 17th. Passed an uncomfortable night from the effects of the jolting on my arm. Roused the cooks at three o'clock; got our breakfast before day; and by the time it was light enough to see, we had resumed our journey. Our course continued due south on the Janos* road, over a bare and open plain. Not a tree or shrub was to be seen in any direction; a few straggling yuccas and cacti alone broke the monotony of the plain. Grama grass was abundant, and, though quite dry, and apparently not containing any nourishment, was eagerly eaten by our animals. The country consisted of an undulating prairie, with here and there a solitary hill of a conical form rising from it. In the far distance were visible short and isolated ridges of mountains, with abrupt sides and jagged summits. Passed a yucca of larger size than any we had seen. Its trunk was about ten feet high; from which arose four stems of equal height, all crowned with clusters of white flowers. Reached *Ojo de Vaca* (Cow Spring), at half past nine o'clock, distant from our camp nineteen miles; where we turned out the animals to graze. This spring is but a depression in the plain surrounded by a couple of acres of grass, resembling an oasis in a desert. Several holes had been dug here by passing emigrants, in which the water had accumulated; though in some of them it had a disagreeable sulphurous taste. Nevertheless, not knowing how soon another opportunity would present itself, it was thought best to fill our kegs. To the east of this spring are three hills, of which the most easterly one is the highest. The westerly one is crowned with masses of granite. After waiting three hours for the train to come up and the mules to graze, we proceeded on our journey.

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* Pronounced Pa-che-te-hú, the last syllable strongly accented.

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* Pronounced Há-nos, the first syllable strongly accented. It is sometimes spelt Yanos.

At this spring, Colonel Cooke's road enters from the east; it then takes a southwesterly course, which we are to follow. The road we have pursued from the Copper Mines continues south to Janos, and thence to Chihuahua. It is the one taken by the California emigrants who come by the way of Santa Fé. It was first opened by Colonel Cooke in his march with his battalion, and train of wagons to California, in the fall of 1846. He took this route by the advice of his guides, though much out of his direct course, in order to strike the old Spanish trail which leads from Janos across a spur of the Sierra Madre, to the frontier settlements in Sonora; because it was known that water was to be found there, at convenient distances. But the more direct route due west from Ojo de Vaca was unexplored; and Leroux, the guide of Colonel Cooke, did not know whether water could be found on it or not. Not wishing, therefore, to hazard the lives of a large body of men by venturing upon an unknown desert, he took the wiser course of striking the old Janos road at the Guadalupe Pass.

Travelling rapidly over an excellent hard road, we reached a pass in a range of hills shortly before sunset, where Colonel Cooke marks down a small watercourse. We were not more fortunate than he was, although there were indications of water in the clumps of bushes, and the numerous doves that were flitting about. Several of the party searched for it up and down for a mile on both sides of the road, but without success. We then passed the hills and encamped on the plain beyond. Passed the grave of a man whom we supposed to be a California emigrant. His name was cut with a knife on a rude board, supported by a heap of stones. Antelopes were descried in abundance to-day bounding over the plain. Of the feathered tribe, we saw blackbirds, crows, hawks, the Carolina dove, quails, meadow-larks, and a flock of what appeared to be black plover; but as they did not alight, and flew beyond reach of my gun, I was unable to obtain a specimen.

May 18*th*. We routed the cooks at two o'clock, breakfasted by moonlight, and were on the move before the first dawn of day. There being an uncertainty about water, it was thought best to get over as much ground as possible before the heat of the day. As the road passed over an open plain, with short grama grass and no bushes, and moreover led to a depression in the mountain range, there was no difficulty in keeping it. We continued rapidly down a gradual descent of about twenty miles, with scarcely an undulation. Not a tree or shrub was seen. After passing to the west of a low range of hills, and crossing another plain of about five miles, we entered the defile or cañon, when we reached a spot marked by Colonel Cooke, where he found water for 50 animals. This was a hole in a rock, a few feet to the left of the road, where we found a few buckets of stagnant and brackish water, so bad that most of the animals refused to drink it. The poor creatures having travelled some thirty-six miles since starting, made repeated trials to drink from the uninviting pool before them, and as often turned away in disgust. We rambled over the rocks, and explored the ravines in this defile, where there were many indications of running water, but none could be found.

Again we pushed on, having yet about fifteen miles between us and the first place where there was a certainty of finding water. Continuing a few miles through this defile, which presented no difficulty for our wagons, we emerged on the opposite plain, where our eyes were greeted with the sight of a long white streak, which we would have taken for a lake, had it not been designated by Colonel Cooke, as *Las Playas*, or the dry bed of a lake. Keeping on the same south-easterly course, we still descended; and as the road was very smooth, we set the mules on a trot and rolled over it at a pretty good pace, considering the long distance we had come. At three o'clock we struck the playas, which seemed to have an extent of twenty-five or thirty miles from the north-west to the south-east, the general course of the mountain ranges and valleys in this region. The surface of this dry bed was an indurated clay, so hard that the wheels of our wagons scarcely made an impression. Its color was nearly white. After rains, this basin, being surrounded by high mountains, receives a large amount of water, which seems to evaporate before vegetation gets a foothold. From indications along its margin, and from what I afterwards saw in other places, it never could have contained more than two or three inches of water in its deepest place. The width, where we crossed, was about a mile and a half. As we were midway across, a beautiful mirage suddenly presented itself towards the south, which led us to believe that the further end of the dry surface we were rolling over, was in reality a body of water. Little clumps of bushes arose from it like islands; and the very grass that grew on its banks was reflected from its imaginary surface.* Some of our party could not be convinced of the illusion, and rode off at full speed to quench the thirst of their panting animals. We hardly knew what course to take here; but seeing some bright green patches amid the vast plain of gray and parched grass, we made directly for it; and great was our joy at finding several large holes, dug by parties who had preceded us, which were filled to the brim with the most delicious water. Near these we encamped.

The country passed over in the last three days is barren and uninteresting in the extreme. As we toiled across these sterile plains, where no tree offered its friendly shade, the sun glowing fiercely, and the wind hot from the parched earth, cracking the lips and burning the eyes, the thought would keep suggesting itself, Is this the land which we have purchased, and are to survey and keep at such a cost? As far as the eye can reach stretches one unbroken waste, barren, wild, and worthless. For fifty-two long miles we have traversed it without finding a drop of water that our suffering beasts would drink; nor has there been grass enough since we left the copper mine region for more than a small number of animals, such as our own.

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* The well-known phenomenon of the *mirage* is called in Sanscrit "the thirst of the gazelle." All objects appear to float in the air, while their forms are reflected in the lower stratum of the atmosphere. At such times the whole desert resembles a vast lake, whose surface undulates like waves. Palm-trees, cattle, and camels sometimes appear inverted in the horizon. In the French expedition to Egypt, this optical illusion often nearly drove the faint and parched soldiers to distraction. This phenomenon has been observed in all quarters of the world. The ancients were also acquainted with the remarkable refraction of the rays of light in the Libyan Desert. We find mention made in Diodorus Siculus of strange illusive appearances, an African *Fata Morgana*, together with still more extravagant explanations of the conglomeration of the particles of air. *Humboldt. Views of Nature*, p. 137.

The few animals noticed seem to have partaken of the wildness of the country they inhabit. An occasional herd of antelopes is seen galloping in the distance, unapproachable by the hunter for the want of a tree or shrub behind which he may advance. Lizards of various hues and graceful shapes glide about with inconceivable swiftness. A startled hare throws up its long ears and bounds out of sight. The prairie dog gives a shrill cry of warning to its fellows, and drops into its burrow. The only things that do not seem terror-stricken are the so-called *horned frogs.* They, as if conscious of the security afforded by their own hideous ugliness, sullenly remove themselves out of the way of the horses' hoofs, and regard the passer with malicious eye. The vegetable presents scarcely more of interest than the animal world. The flowers are almost entirely of that most unbecoming of all hues, yellow—varying from sulphur color to orange—and glaring in the bright sunlight. One becomes sickened and disgusted with the ever-recurring sameness of plain and mountain, plant and living thing. But if the day's travel is tedious, it is almost compensated by the glory of the night. In this clear dry atmosphere, without cloud or haze, moonlight and starlight have a splendor of which dwellers upon the sea-side cannot conceive.

Due north from our camp I noticed a range of lofty mountains, eighty or a hundred miles distant, extending towards the west, which I suppose to be a continuation of the copper mine range along the Gila. West of this arose another and less distant range. To the south was an uninterrupted plain, with no mountains, or even a hill, visible.

May 19*th*. The weather was very cold this morning; ice was found in our camp buckets, and we were all glad to wrap our blankets around us. After following the edge of the dry lake for a mile, we came to more springs and water holes, near which the grass was excellent. From here our course was southwest, directly for a pass in the mountains, known as the *Sierra de los Animos*, about seven miles distant. The road was good, the pass presented no difficulties, and we soon reached the plain beyond, where we turned more to the south. Three or four miles brought us to the dry bed of a stream, where we stopped the train, and traced its banks on both sides of the road for more than a mile, without finding water. Before us lay a broad valley, bounded on the west by a range of high mountains; and at some eight or ten miles distance I noticed a dark line of trees, with similar lines intersecting it. This indicated a stream; and four or five miles more brought us to one of its tributaries. But, alas! it was but a dry bed, though fine, large trees, with thick shrubbery, grew along its banks, marking its course for miles. Again we stopped. Dr. Webb took the rocky bed, determined to follow it up, while I, with some others, struck across to a clump of trees near the base of a mountain, the luxuriance of which gave promise of water. In this we were not disappointed: a walk of a mile brought us to a fine spring, from which a rapid brook dashed over the rocks, dispensing a refreshing coolness, though it entirely disappeared within four hundred yards. The grass being good here, we turned the animals loose, and made a halt of three hours.

On resuming our journey, our course lay across a plain, gradually descending towards a valley intersected by several deep gullies, which led to the dry bed of a stream. We followed this for some distance, but found no water. Crossed two other beds of streams also dry. On our right was a large grove of oaks, which is noted on Colonel Cooke's map; and about four miles after passing this, we struck the source of the stream we had noticed so long on our right, where we found the water standing in large pools. Here we pitched our tents, and encamped for the night, after a journey of thirty-two miles.

May 20th. Another cold morning, with ice in our water buckets. Fires to warm ourselves were quite out of the question, as not a particle of wood was to be seen. For cooking purposes, we generally collected a little where it could be found, and put it into the wagons. Our course to-day was nearly south, over a broad valley, from eight to ten miles across, hemmed in on both sides by high ranges of mountains. So level was this valley, and so luxuriant the grass, that it resembled a vast meadow; yet all its rich verdure seemed wasted, for no animals appeared, except a few antelopes and several dog-towns. In every other instance where the prairie dogs were congregated, it was on the most barren spots, far from water, where the grass was short, and the soil hard and gravelly. Here the soil was a rich black loam, as it appeared where the little creatures had thrown it up, and the grass was nibbled down to its roots.

After passing a small stream (where we caught some curious water insects), our course lay direct for the mountains, which gradually closed in upon us, until we arrived by an easy ascent at the summit. Here we struck the old road, leading in a southeasterly course to Janos; and here our real difficulties seemed to begin. We had reached what appeared from the plain below to be the apex of the ridge; but we found ourselves all at once surrounded by steep hills, steeper and higher mountains, ravines, gullies, and frightful cañons. A wide and discouraging prospect was open before us. First came an ocean of mountain peaks, if I may so term them; for, from the eminence on which we stood, we overtopped the whole, looking down upon them as in a birds-eye view. Beyond these, looking to the west, arose other mountains, which gradually receded from the view, until in the dim distance the horizon was bounded by a faint blue outline of some range a hundred miles distant. Colonel Cooke deserves great credit for this bold and successful undertaking, which has not been sufficiently appreciated by his countrymen. Here his whole command was employed in opening this trail, and making it passable. But, with all his labor, it is still a most difficult pass, and dangerous for loaded wagons. Although ours were light, it required great caution to get through. The first descent is down a long hill, where the wheels have to be locked. Next the road passes down a chalky cliff, whose yielding surface crumbles beneath the hoofs of the animals, making it necessary not only to lock, but also to restrain the wagons with ropes. After this it winds over peaks, the declivity always greater than the ascent, until at length the valley is reached. Our progress was slow and toilsome. We were constantly obliged to assist the wagons, by pushing them when going up, or holding back in their descent; but the most dangerous portions were when we had a sideling inclination to contend with; for here the wagons had to be supported on one side, as well as held back. According to Colonel Cooke the descent here is a thousand feet. A perceptible change of climate was indicated by the vegetation: besides the greater abundance of plants peculiar to a warm country, a marked difference was observable in the same species. Those plants which we saw on the table-land just in bud, were, in the course of the descent, seen in flower, and further down with maturing fruit.

Two bears were observed to-day after entering the defile; they were so large as to be taken at first for mules. When their real nature was discovered, several of the horsemen gave chase, but without success; for Bruin gained on them at every leap, and soon disappeared. All the hills and valleys are covered with trees, chiefly live-oak and cedar; and in every open space there is excellent grass.

After four or five hours' hard tugging we reached a small stream, where the road took a sudden turn to the south, leading to a frightful cañon. Here we came to a stand, and waited for the wagons to come up. I had walked the whole distance through this defile, which is known as the Guadalupe Pass, reaching this point in advance. When all had come up, both men and animals were glad to hear the order to unhitch the mules and encamp for the night, which we did near a small rivulet, though our day's journey could hardly have exceeded twelve miles.

For the last three days we have noticed the tracks of several mules, all of which were shod, accompanied by one man on foot. They appear to have been made several months ago, at a time when the ground was wet; and as there has been no rain, it must have been during the winter after a slight fall of snow. As the Mexicans do not shoe their mules, we believed the party to have been Americans; and a close inspection of the print made by the man on foot convinced Colonel Craig that it was a soldier's shoe, and that the party consisted of the seven deserters from his command who left in February. They took with them but six mules, so that the seventh had to go on foot. We had learned that they had not reached Chihuahua; and as they had not been seen at the settlements on the Rio Grande, the inference was, that they had set out for California. These foot prints therefore were objects of interest to us as we watched them from day to day.

The cañon where we are now encamped, is filled with walnut, oak, ash, and sycamore trees. The last mentioned, is quite a different tree from that known by the same name in the United States, and, if it would bear our nothern winters, would make a fine addition to our ornamental trees. Its leaves have a graceful droop, the bark is almost pure white, very clear and smooth, and contrasts strongly with the foliage. The fruit instead of being a solitary head, or "button ball," like ours, is borne in large clusters of three or five, strung upon a slender stem. The banks which overhang this defile are steep and rugged, and present as great a variety of plants of the cactus family, as the valley does of trees and shrubs. Besides the various kinds seen on the plains, new ones were noticed here, nearly all of them in flower. The beautiful yucca raised its tall stems of white flowers, while the agave towering above all, with its brilliant yellow blossoms, completed the floral array of this wild and romantic pass. Fatigued as I was with my hard day's walk, and my arm still bound to my side, I did not wait for dinner, but clambered up the bank, and seating myself beneath the shade of a cedar, took two sketches of the place, one of which looking south exhibits a singularly capped rock, standing detached in the cañon.

May 21*st*. A great change in the temperature of the air, has accompanied our descent from the high plains. The little stream on which we are encamped flows west; so that it is now evident we have crossed the great dividing ridge, or central plateau which extends from north to south across the whole continent of North America.

Closely hemmed in on both sides by overhanging rocks, our route continued along the cañon for five or six miles, directly in, or near the bed of the stream, each turn presenting some new scene of beauty and grandeur. Tall sycamores filled the narrow space between the walls of the defile, while flowering shrubs shooting their slender branches from the recesses where a little earth had given them a hold, formed a complete canopy over our heads. The various cacti, the agave, and the yucca also abounded, each flourishing in perfection, and, as it were, striving for the ascendency. To these must be added the *fouquiera*, with its tall leafless stems and its brilliant scarlet flowers, which shot forth from every rocky crevice.

On emerging from the cañon our road led up a high hill where there was a level plateau, of a desert-like character, about eight miles across, with an excellent road, which brought us to the rich valley of San Bernardino. Here was stretched out before us a level patch of green, resembling a luxuriant meadow, some eight or ten miles long, by one broad; and directly beyond, on a little spur of the plateau, lay the ruins of the hacienda of San Bernardino. Crossing this valley we stopped on the banks of a little stream, a tributary, or one of the sources of the Huaqui, which passes within a few rods of the ruins. As we approached, a flock of herons arose from the water, alarmed at the unusual invasion of their quiet haunt. One of them, whom curiosity had prompted to leave his companions and take a closer inspection of the intruders, fell a victim to his boldness, and was added to our ornithological collection.

San Bernardino is a collection of adobe buildings in a ruined state, of which nothing but the walls remain. One of these buildings was about one hundred feet square, with a court in the centre; and adjoining it were others with small apartments. The latter were doubtless the dwellings of the peons and herdsmen. The whole extending over a space of about two acres, was inclosed with a high wall of adobe, with regular bastions for defence. Being elevated some twenty or thirty feet above the valley, this hacienda commands a fine view of the country around. Vast herds of cattle were formerly raised here, but the frequent attacks of the Apaches led to the abandonment of the place. Some cattle which had strayed away and were not recovered at the time, have greatly multiplied since, and now roam over the plains and in the valleys, as wild and more fierce than the buffalo. Colonel Cooke, in his march to California, supplied his whole command with beef from these herds; and the passing emigrants destined for that country, replenish their stores from the same source. I saw a number of these cattle when riding in advance of the party, but having only my double-barrelled gun and my revolvers with me, did not dare to shoot at them. These herds were small, not more than six in each, led by a stately bull. A wounded bull would be a serious antagonist, more so, I have been told than a buffalo. This establishment was abandoned about twenty years ago; since which time, no attempt has been made to reoccupy it. Such seems to be the case with all deserted places here; a fatality or superstitious dread hangs over them, and when they have been left two or three years, they are not again inhabited.

After watering our animals, and giving them a couple of hours to feed on the rich grass here, we resumed our journey, taking a westerly direction. The road first entered a thick chapporal of mezquit through which it continued four or five miles; when we struck for three mountains, in a line with each other from east to west; the last of a conical form, crowned by a perpendicular mass of reddish rock, covered with green and yellow moss. Here the country was exceedingly hilly and barren. For two or three miles the vegetation was limited to a perfect forest of the *fouquieras;* some of which grow to the height of twenty feet, their leafless stems crowned with scarlet flowers. I would have remained at San Bernardino for the night, but expected to find water at the base of these hills, as indicated by Colonel Cooke. We saw many places where there had been water, and even a running stream; but all was dried up, and there was no alternative but to push on some twelve or fourteen miles to Black Water Creek, the *Agua Prieta* of the Mexicans. Emerging from the hills we came upon an open plain with an excellent road down a gradual descent for about ten miles; and seeing before us the bottom of the valley, with a line of bushes which I supposed to mark the stream we were in search of, I hurried on in advance of the wagons, in order to select a good place for an encampment. A couple of hours brought me to the spot, where to my great disappointment, I found only a dry ravine without a drop of water; nor did it appear that there had been any there for months. Rank grass and weeds had sprung up in the bed where water had run, had come to maturity, and shrunk away for the want of further nourishment. Not a tree was near us, and every thing around had a most forbidding aspect. For a mile before reaching this watercourse, we had noticed many well-beaten trails of wild cattle, some of which were quite fresh, and directed towards a common centre.

A few miles in advance, following the road, I also perceived a line of large cotton-woods. I hastened forward in advance of the party, and when I reached the spot, I directed Wells, my carriage driver, to look around among the trees and bushes, whose luxuriance indicated their proximity to water. He had got but a few rods when I heard him halloa, and soon after take to a tree. His red flannel shirt had excited the ire of a bull, which, with a herd of wild cattle, was browsing among the bushes. But my party coming up at this juncture, they all took to their heels in single file, the bull leading the van, and were soon lost in the high chapporal. We were again doomed to disappointment. No water was found. I now hastened back with all speed to Black Water Creek, where the train with the rest of the party had arrived. They were pondering what to do in the dilemma. Their disappointment being not less than my own. We had now come about twenty-two miles from the last water, and nearly forty from our last camping place in the Guadalupe Pass. So confident had we been on leaving San Bernardino that we should find water at this place, if not at two intermediate stations, that we had not taken the trouble to fill our kegs. We always avoided carrying kegs of water when not absolutely necessary, on account of the weight, and the appearance of a river on the map was a sufficient excuse for omitting to do so at this time. For the same reason we had collected no wood. The place where we had stopped was also entirely destitute of grass, so that we had but a poor prospect of a meal before us. Two of us had a little water in our canteens; we put this together, made a fire with some buffalo chips, *i. e.*, dried cattle dung, and made a pot of coffee. It was now quite dark, and too late to look further for water. The mules were, therefore, fastened to the wagon wheels, and tongues, without food; when we, all fatigued and supperless; threw our blankets around us, and without pitching our tents, crept beneath the wagons, and tried to forget our unpleasant situation in sleep. The bellowing of bulls and the incessant yelping of the wolves occasionally disturbed our slumbers; nevertheless, we obtained a refreshing night's repose.

Among the incidents of the day, the following deserves mention. Shortly before we stopped the attention of the party was attracted by a glittering object, a few rods from the road. On examination it proved to be a highly polished bayonet; and Colonel Craig immediately recognized it as belonging to a U. S. army musket. Further search disclosed a grave, which appeared to have been scratched open by the wolves, and the body carried off. A pair of soldier's pantaloons, and part of a cotton sheet were also found near. There was every reason to believe, therefore, that this was the grave of an American soldier, and probably of one of those who had deserted from the Copper Mines.

While jogging along to-day, a wolf passed by, which I shot from my carriage door. Many antelopes were also seen, but we were in too great a hurry to go in pursuit of them. For the same reason none of the wild cattle were shot.

May 22*d*. As soon as it was light, Colonel Craig, Mr. Thurber, and others set off in search of water. They took one of the fresh cattle trails; and, after following it about two miles, they struck a fine spring, which we afterwards learned was known to the Mexicans by the name of *Agua Prieta*, or Black Water. To this place we immediately moved the wagons, and encamped for the day.

CHAPTER XI.

AGUA PRIETA TO ARISPE.

Leave the California road—Agua Prieta—Send party to look for Fronteras—Mexican soldiers sent to guide us in—Journey resumed—Strike a rich valley—Break a wagon—Reach Fronteras—Description of the place—Abandoned by its people and recolonized—General Carrasco—Couriers between the frontier posts—Attack by General Carrasco on Apaches at Janos—Campaign against the Apaches—General Carrasco's opinion of American officers—The Doctor beset by the sick—Leave Fronteras—Coquiárachi—Valley of Barbari—Wild turkeys—Mountain Pass—Gold Mine—Bacuachi—Sonora River—Magnificent cañon—Chinapi—Curious sandstone formation—Arrival at Arispe.

We had now reached the farthest point to which we could follow the California road; our destination being Fronteras, the nearest town in Sonora, which is laid down on Cooke's map as about fourteen miles to the south, we must leave it here. But as no wagon road or trail could be discovered in that direction, I did not think it prudent to set off with our wagons without knowing more about the country. Colonel Cooke does not speak positively as to the distance of this place, having obtained his information from an Indian. I therefore despatched Messrs. Thurber, Cremony, and Stewart to find the place, and ascertain if the country between it and our camp was practicable for wagons. They took with them as guide a Mexican, named

Jesus, one of our teamsters, who had visited the place some years before by another route, and knew the landmarks. This name is so common among Mexicans, particularly the lower classes, that one can seldom get half a dozen of them together without finding a Jesus in the company. We had two of the name in the Commission for a year; both of whom, I am sorry to say, proved entirely unworthy of it.

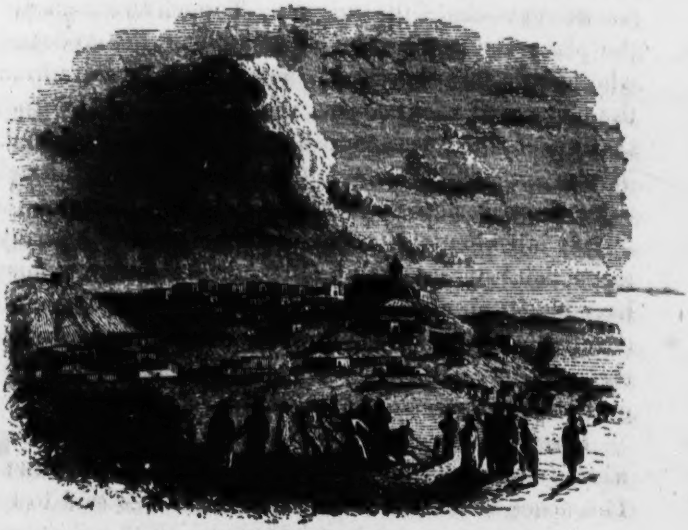
Remained quietly in our tents during the day, the mules and horses feeding on the grass near by. Parties went out in search of wild cattle, many having been seen at daylight; but they all returned unsuccessful. For lack of better sport, therefore, we amused ourselves in firing at wolves which constantly approached the spring during the day; only one however was killed. During the night heard the bellowing of bulls in all directions. Several of our men were on the alert, but the cattle doubtless scented the danger, and would not approach.

May 23*d*. At 6 o'clock this morning we espied four strange looking figures dressed in white, approaching the camp on a run, which my glass showed to be Mexicans. They proved to be a party from Fronteras, sent by General Carrasco, the officer in command; they had left the night before at 8 o'clock, and brought letters from the General and from Mr. Thurber, who, with his party had reached there in safety. General C. extended the hospitalities of the place to us, and sent the four soldiers to be our guides. Mr. Thurber wrote that his party had taken a southerly direction across arroyos and through a dense chapporal, starting up numbers of wild cattle, until near sunset, when they came in sight of the town. On drawing near they observed the greatest commotion in the place; people were crowding in front of the church, and upon the house tops, and the steep street which led to the plaza, was thronged with women and children. Their approach had been observed by the sentinel on guard. He, supposing them to be Apaches, gave the alarm; and the consequence was, a general turn out to repel the supposed attack. When the mistake was corrected, their fear of the Apaches gave place to wonder at *los Americanos*, these being the first specimens of the Yankee nation that many of the people had ever seen.

We now hurried in the mules, and, rapidly completing our preparation for the start, were off by 10 o'clock. Our course lay south towards the western point of a high mountain. Our guides led us along a valley through which ran the stream called Black Water Creek,—that is to say, when there was water enough in it to run. We found it here and there in pools. The country was flat, and covered with luxuriant grass, resembling a meadow. Our course was slow, being much impeded by deep gullies, some of which had to be cut down to let the wagons cross. In passing one, where the bank was short and steep, the hounds of one of Colonel Craig's wagons were broken off. It was feared that we should be obliged to abandon the vehicle; but thanks to the ingenuity of my carriage driver, who spliced it with a crotched tree, we were able to proceed after a couple of hours' delay. These short and sudden plunges are more dangerous than long or even steep hills, and require the utmost care in passing them. The tongues and hounds are liable to snap off; and nothing so completely disables a wagon as an accident of this kind. As we proceeded, the valley became more picturesque, being covered at intervals with mezquit trees, larger than any we had seen. In the afternoon we were again brought to a stand, and on turning to ascertain the cause, found that one of the tires of Colonel Craig's wagon had fallen off. This was repaired in half an hour by lashing it on with halter chains. As we approached the mountain, we found ourselves in a valley still more luxuriant, having a beautiful stream winding through it, overhung with walnut, ash, and cotton-wood trees. Finding it imposible after our delay to reach Fronteras to-day, we stopped at five o'clock near a fine grove, on the banks of the stream, where there was excellent water and an abundance of grass, and there pitched our tents for the night.

May 24th. At six o' clock we were off, keeping in the valley and following the stream which led around the western extremity of the mountain called Covayan. Our course still continuing south, we struck across an elevation, and entered the valley beyond, here covered with large cotton-wood trees. The road now continued level; and after a ride of four hours, we reached Fronteras. As we approached, men, women, and children came out to meet us, ours being the first American wagons that had ever been seen in the place. General Carrasco met me as I alighted from my carriage, and took me to his quarters.

Fronteras was formerly a town of considerable importance. It was established about eighty years ago as a *presidio*, or garrison, and at one time contained two thousand inhabitants. The view of this town from a distance is pleasing. It stands upon a point of table land, which juts out into the valley like a promontory in the sea. The church forms the prominent object in the landscape, and its style is quite picturesque; its effect also is heightened by its somewhat ruined condition. Along the steep sides of the hill, the houses are placed, rising one above another, which makes the place appear much larger than it really is. Once within the town, one's ideas of the picturesque are soon dissipated by the sight of its ruined adobe buildings; though he soon forgets the desolation around him in looking



Fronteras, Sonora,

upon the green fertile valley spread at his feet. Fronteras, like most of the military colonies, fell into decay, chiefly from the neglect of the central government to properly provide for the soldiery, in consequence of which, the inhabitants were left without protection from the attacks of the savages. To such an extent did the place suffer from the incursions of the Apaches, who killed off the herdsmen, drove the cultivators from the fields, and took captive the women and children, that about three years ago it was entirely abandoned. Within six months General Carrasco has re-established the colony, a new population, including many of its former inhabitants, have taken possession, and in many respects it appears like an old settled town. Acequias have also been opened, large fields of wheat and corn cover the beautiful valley, numerous cattle graze on the meadows, and the importance which the place once enjoyed seems about to return.

Fronteras is supported by a valley two miles in width, which we entered about six miles from the town. This space of arable land, limited as it is, is said to be one of the largest and best in Sonora. The soil is exceedingly rich, and is capable of producing abundant crops of maize and wheat (the only cereals cultivated), fruits of various sorts, and, with pains, every kind of vegetables. But here, as in all other parts of Mexico that I have seen, this species of culture is but little attended to. Beans, pumpkins, and onions are raised, it is true, but all other vegetables are unknown.

A small stream passes by Fronteras, which, although called a river, would scarcely be characterized as a creek in the United States; but all the streams here are very small. This river winds its way through mountains, and occasionally expands, forming a valley or bottom covered with rank grass and luxuriant foliage. It is here called Fronteras River, and like many other streams in the country, changes its name with the towns it passes. Lower down it is called the Sonora River, by which name I shall speak of it in future.

General Carrasco is at present in command of all the troops on this frontier. He has increased the number of posts, and keeps up a weekly communication between them all by means of couriers, two of which, armed with musket and lance, traverse the broad deserts, eluding the Apaches, who are lying in wait for all small parties of travellers. They perform most of their journeys at night, and generally go on a trot, by which means they accomplish nearly as much in a given time as a horse. War in the field does not succeed against Indians, for unless they feel strong enough to overcome their foe at once, and with little loss, they retire and are not to be found. The General has determined to carry the war into their very fastnesses, and to make it one of extermination. If his troops were equal to their commander, the Apaches might have cause of fear. He lately made a successful descent upon the Indians at Janos. This place is in the State of Chihuahua, which is at peace with the Indians, and whose government serves them with rations. Taking advantage of this, they carry their predatory excursions into the State of Sonora, and run off large numbers of mules and horses, which they take to the frontier towns of Chihuahua and sell. General Carrasco, being informed of this, disregarded the State limits, and came suddenly upon the town of

Janos, near which he found a body of Indians, whom he attacked and routed. Some twenty men were killed, and fifty or sixty, chiefly women and children, were taken prisoners. These were sent into the interior, and there distributed among the haciendas and ranchos as servants, too far off ever to reach their homes again. The military commander, Colonel Medina, was much enraged at the proceedings of the Sonorian General in invading his territory, and reported the case to the central government, which, however, approved of Carrasco's course.

When we entered the town, the General was just preparing to set out on a campaign against the Indians on the Gila; and his troops, nearly four hundred in all, were assembling in front of the town. There were three companies of infantry and one of horse. Some were dressed in blue great coats and high caps, and others in short jackets, while all wore the common loose white cotton drawers and shirts of the country. Many sported broad-brimmed glazed hats, with a white band, while the hats of others were of straw; but in all cases these coverings were stuck on the top of the head, and tied under the chin. Every variety of costume seemed admissible; and the only point in which they all agreed was in being exceedingly dirty. There was scarcely a pair of shoes among them, the substitute being sandals of raw hide, fastened with thongs of the same material. The officers in this corps, several of whom I learned were from the city of Mexico, appeared to be intelligent men. They were well dressed, and exhibited a striking contrast with the privates. I also noticed among the non-commissioned officers a sergeant, who was an Apache Indian. This man had long been in the Mexican service, where he was well treated. He exhibited much intelligence, and being familiar with the haunts of his people, was to guide the Mexican soldiers in their campaign.

The camp equipage and simple fare of these soldiers presents a striking contrast with what an American brigade would deem necessary. Each man, besides his musket, forty rounds of ammunition, and a blanket, carries rations for six days, the daily ration consisting of two pounds of pinole (coarse wheat or Indiana meal); half a pound of dried beef, and half a pound of panoche, the coarse brown sugar of the country. The beef is cooked on the coals before starting, and the pinole requires no other preparation than stirring with water, and sweetening with panoche. Cooking utensils are, therefore, unnecessary, and a tin or coarse earthen cup is all that is required. Every man carries a sheath or jack-knife; and even this may be dispensed with, for the meat is dried in long strips, and pulled to pieces with the teeth and fingers. Besides what these soldiers carried, there were some sixty pack mules, laden with camp equipage for the officers, tents, ammunition, provisions, and corn, a very small train for a body of four hundred men, about to traverse a desert country, where no supplies could be procured.

The inhabitants just now are very poor, as they have not yet begun to realize any thing from their crops. Estimating their returns at the usual rate, they expect to obtain about twelve thousand bushels of corn and wheat the coming harvest. For their present subsistence they rely entirely upon dried meat from the wild cattle, and pinole. Not a particle of coffee, chocolate, or rice was to be obtained in the place. On my making known to General Carrasco that I wished to purchase some beef and corn, he ordered an ox to be killed and sent to our camp in the morning, together with a bale containing a hundred pounds of dried beef, and eight or ten bags of corn, for none of which would he receive any pay. During the hour or two spent at his quarters he entered into a warm discussion with Colonel Craig on the battles in which the Mexican and American armies had been engaged in the late war, in several of which he had participated, and respecting all of which he was very well informed. He seemed to understand well the qualities of our general officers, and expressed the most unbounded admiration for several, particularly the Commander-in-Chief. He did not approve of the plan of making General Scott President; but said the United States should present him with three millions of dollars, and give him the mission to England or France.

Our camp was below the hill, about a quarter of a mile from the town, beneath the branches of a gigantic cotton-wood. Here we were detained four days, to make the necessary repairs on Colonel Craig's wagons. The first day little was done. The next being Sunday, the mechanics would not work at all, even with promises of large pay; yet they sang, and danced, and drank aguardiente all the afternoon and evening. On Monday our men took hold of the job, and by Tuesday night the wagons were in readiness to move. The people of the place, for want of other employment, hung about our camp from morning to night, though the cooking department seemed to possess the greatest attraction for them. Men, women, and children crowded around the presiding functionary, for the double purpose of cultivating a knowledge of the culinary art and of picking up such scraps as he thought proper to bestow upon them. Their own cooking is all done in earthen vessels; and the abundance of iron utensils with which we were furnished seemed to impress them with the idea of our great wealth. The doctor, too, was beset by these people. Their complaints were chiefly diseases of the eyes, and such others as result from improper food and unclean habits. The doctor accompanied his medicine with a lecture on that virtue which ranks next to godliness, and the necessity of employing their time in industrial pursuits, and of obtaining by their own energies the comforts they so much need. He prescribed and gave a small quantity of rice to a sick woman, and soon found that nearly all her sisterhood in the place stood in need of similar aliment.

I found many of these people quite desirous to emigrate to the Copper Mines; and they earnestly begged permission to accompany me back. Some fourteen years before, when the mines were worked, a considerable trade between here and that place was carried on, which, if we maintained a post there, would probably be resumed.

It is difficult to make the people of this place believe that we are not a party of traders; and every hour in the day we have calls to sell needles, thread, and a hundred little articles. They seem different in many respects from those of the towns on the Rio Grande, where contact with the Americans has had its effect (would that I could say for good) upon the Mexicans. Their manners and habits of living are more simple, and their hospitality more warm and generous, though with much less means for its display. We observe that the *olla*, or earthen pot, which is almost their only domestic utensil, is different and better finished than that of El Paso. They are also borne differently when used as water-jars; those of El Paso being carried on the shoulder, and supported by one hand, while the women here, without exception, walk with a firm step and erect figure, with these frail vessels, frequently containing four or five gallons of water, balanced upon their heads.

The morning before we left, a wild bull was brought to us. These animals are pursued by the Mexicans on horseback, caught by a lariat, and thrown. They are then secured by the horns, the tips of which are first sawed off, to a domesticated animal; and thus tied, they come along quietly enough. We selected such portions of this animal as we wanted; and the remainder, including the head and offal, was eagerly seized upon by the people, who had been watching the process of butchering with as much delight as the starving wolf or buzzard does a perishing mule.

May 28th. Took our departure at seven o'clock, and at a short distance passed the first way-side cross. Though we met them frequently enough afterwards, we saw none as striking as this. It was about ten feet high, covered with evergreen, and supported at the base by a large mound of loose stones. Usually, these crosses are simply two rough sticks bound together in the form of the sacred emblem; though some we saw were constructed with more care, and had inscriptions carved on them. They mark the places where travellers have been murdered by the Apaches.

About six miles from Fronteras we passed a small stream running through a little valley, on the opposite side of which, on the edge of the plateau, stood the deserted village of *Cocuiárachi*. The fields that skirted the roads, the rows of pomegranate trees in full bloom, and the orchards of peach, pear, and mulberry, all betokened a high state of cultivation. We halted a few moments at the place, and entered many of its tenantless houses, which are fast falling to ruin. The church was in good condition; for the savages, though they often burn and destroy the habitations of the people, always spare their places of worship. It was indeed sad to see such desolation, where but a few years before there had been so much happiness. On leaving this place we ascended a long and very steep hill, to accomplish which we had to double our teams. Continuing on the plateau for six or eight miles, we again descended into a pleasant valley, called *Barbabi*, thickly covered with oaks. As we were moving along through these, a flock of wild turkeys flew up, from which one of the party dropped a fine large one with a pistol shot. Having now made twenty miles, and finding ourselves in one of the most romantic spots we had yet seen, with fine grass and water at hand, we pitched our tents beneath some oaks and rested for the night. We were in a complete amphitheatre of low rounded hills, all covered with trees, with a high and rugged mountain on the south. Taking it altogether, I had seen nothing that reminded me so strongly of the scenery of Vermont and New Hampshire. Near the little brook where we encamped were some wild currant bushes, from which we gathered an abundance of fine fruit. These made into a sauce, and added to our turkey, furnished us such a supper as does not often fall to the lot of travellers. A deer, too, was killed, which was laid aside for the morrow. This valley, owing to its seclusion, is considered one of the most dangerous places in the country, a hundred persons having been murdered here within the last two years.

May 29th. Owing to the great heat during the middle of the day, I determined to set off early. By daybreak, therefore, we were under way, and soon after entered a mountain pass or cañon, which proved to be exceedingly difficult for our animals. So long and steep were the ascents, that at each of them we were obliged to double the teams, and at every descent to chain the wheels. The valleys and mountain sides were covered with oaks, while the summits, as far as I could judge, were covered with pines. The whole country during the night had been on fire, including the mountain; so that every thing around us was now black and gloomy. One of Colonel Craig's wagons again broke in this defile, causing a delay of several hours. These mountains are said to contain gold, and we were told that "lumps," in comparison with which those of California are but gravel stones, could be had for the picking up. Our Mexican guide told us that he had obtained a thousand dollars there in one week; and we afterwards learned that the placers had really been worked with great results, but the frequent inroads of the Apaches had caused them to be abandoned. After leaving the cañon, our course lay south-east over a pleasant and well-wooded country of oak, ash, and mezquit. The latter increases much in size as we proceed south. Reached a small running stream, when a beautiful valley a mile in width opened upon us, with luxuriant fields of wheat, corn, and pease. It was intersected by a broad acequia, the course of which was marked for a mile or more by a line of cotton-woods and willows. At the western extremity of this valley, on a spur of the plateau, stood the village of *Bacuachi*. This is a peculiarity of all Mexican towns on the frontier. Farmers do not build their ranchos or houses on their arable lands, but congregate on the desert tableland, elevated from thirty to a hundred feet above the adjacent valley from which they derive their subsistence. The great end of security is thus attained at the sacrifice of all comfort and convenience; no trees or shrubbery grow about the houses, nor is a blade of grass to be seen, but a glaring reflection from the light, gravelly soil strikes the eye, which is doubtless one cause of so many diseases of that organ. A house surrounded by foliage with a grassy lawn, which makes a country residence so attractive, even though it be but a humble cottage, is unknown here. Indeed these people at present know not what comfort is; but with their rich soil and the advantages of irrigation, a few years only of peace and safety would be required to make these beautiful valleys the most charming abodes imaginable.

We did not stop in the village, but drove on to the banks of the stream which ran at the foot of the hill beyond, and there encamped. The inhabitants, who had been in great consternation, came rushing down the hill towards our camp, greatly relieved at ascertaining our peaceable character.

After arranging the camp we strolled up to the village, which turned out to be a truly miserable place. Though once prosperous, it is now nearly depopulated. It is surrounded by an adobe wall about five feet in height, intended doubtless as an inclosure for cattle, rather than as a work of defence. The houses were mostly in a dilapidated state, and the church itself was roofless, though a few branches of trees had been laid from wall to wall to keep the sun from the heads of the devout. But if the church was suffered to become a ruin, the good people had taken care of certain noisy appendages, without which they could not realize that they worshipped their Creator. Near their church they had suspended from a beam by thongs of raw hide, resting on two forked sticks, three fine old Spanish bells, one of them bearing the date of 1695, the other of 1721.

Our visit attracted much attention, and we were soon surrounded by groups of the inhabitants, eager to know who we were and what had brought us to this secluded spot. I inquired for the alcalde, and on being conducted to him, exhibited my letters from Generals Condé and Carrasco, which quieted all fears.

We were invited to take a seat upon an adobe projection, a cool though rather hard substitute for a settee, whereupon we entered into conversation with the alcalde, and groups of inquisitive followers. Indian depredations formed the sole topic of our conversation; and much surprise was expressed at our boldness in venturing so far with so small a party. In such constant fear do these people live, that I found it impossible to hire two men to take out our mules to a meadow half a mile from the village. At length I addressed to the authorities a formal demand for two herdsmen; this was complied with, and two men soon after appeared, armed to the teeth. But by this time we had made arrangements to have some green wheat cut and brought to the camp, which enabled us to dispense with the grazing. By scouring the town we succeeded in purchasing three dozen eggs, the entire stock on hand. American coin would not pass. We offered in pay both half dollars and gold half eagles; but they shook their heads. To my question, "Is it not good gold and silver?" I received the universal reply of "*Quien sabe?*" Who knows? Fortunately we had a few Mexican dollars, which we were obliged to change for the *joles*, or copper coin of the State, 128 of which make a dollar.

On returning to camp, we found it full of people; and it was with difficulty that the cooks could prepare our meal for the crowd of wondering spectators that surrounded the fires. I thought I had seen human wretchedness in its worst state, but here was a lower depth. A more degraded, filthy, destitute population than this, can hardly exist. Their number is about one thousand. Distance travelled to-day, twenty-one miles.

May 30*th.* Soon after leaving Bacuachi, we turned from the valley and took the bed of the Sonora River. The mountains here approach so close together that the river has barely washed its passage through, and no valley or bottom is again seen for many miles. We entered this cañon by the bed of the river, which is but a few inches deep, crossing and recrossing it a hundred times during the day's journey. Sometimes for miles we were so closely hemmed in by the perpendicular sides of this extraordinary defile, which rose six or eight hundred feet above on either hand, that we could not see a hundred yards before or behind us; and at other places, the dense foliage which sprung up from little islands, hung like a canopy over our heads. The whole course of the river through this cañon affords a series of most delightful scenes; and the first few miles of the ride through it will long be remembered by those who enjoyed it, as the most beautiful portion of our route. The rocks through which the stream has forced its way, exhibited the most picturesque and fantastic forms. Columns, turrets, towers and pyramids, as nature made them, decked with brilliant flowers or bearing strange cacti, appeared at every turn. From projecting ledges sprung the yucca and agave, where there seemed scarcely soil enough to give them a foothold. The air was filled with a delicious perfume from the grape and mellilot; and birds of brilliant plumage and sweetest song flitted across our path.

It will hardly be necessary for me to remark, that there is no wagon road here, nor have we seen one since we left the California road at *Agua prieta*. The country admits of nothing but mule paths; and what little transportation there is, is carried on the backs of mules. Yet, with a guide, we managed to push our way with my carriage and six mule wagons through this defile, by cutting away the bushes and following the bed of the stream. Had there been any falls in this perpendicular cañon, we should have been in a sad predicament; but fortunately the descent of the river was very gentle, creating only a slight ripple here and there. Deer and turkeys were frequently seen, but there were so many places of concealment, that on the first alarm they eluded our search, and none were killed. After leaving the cañon a valley opened upon us, still hemmed in by mountains; this we followed about nine miles, and encamped near a cluster of adobe houses, which bears the name of Chinapi. Distance travelled about twenty-two miles.

Just before reaching this place we met some Mexicans, from whom we inquired the distance. Wishing also to obtain some information relative to the products and population of the country, we asked, "How many people are there in Chinapi?" The reply was, "*Bastante*," Enough. "How many are enough?" "*Quien sabe?*" Who knows? In my intercourse and journeyings with the lower class of Mexicans, these same replies have been given to me a hundred times. Had I asked if the place contained five hundred people, the answer would probably have been, "*Quisas*," Perhaps. But when they don't know what to answer, the universal reply is, "*Quien sabe.*" The proper expression, "*No se*," I do not know, is rarely heard, even among intelligent people, so habituated have they all become to the other form.

One of the sandstone formations which lay directly by our path, after we had left the cañon and were journeying along the valley, presented so singular an appearance, that I made a hasty sketch of it as I passed. The three columnar masses are about fifty feet in height. A small stream flows directly at their base, where there is a dam to raise the water and direct it into an acequia which irrigates the valley around.

Columnar Rocks near Arispe.

May 31*st*. Our route continued along the bed of the river for about ten miles, the valley widening as we advanced and becoming more cultivated, when at length we reached *Arispe* and encamped in the Alameda, a beautiful park about a thousand feet in length. As soon as our tents were pitched, Colonel Craig and Mr. Cremony took my letters, and went up into the town to pay their respects to Colonel Garcia the commanding officer. Several officers soon after called on me and invited myself and party to dinner at 5 o'clock. The invitation was accepted by Colonel Craig, four gentlemen of the Commission and myself. The Padre and several prominent citizens were present, and an elegant dinner was set before us, particularly rich in fruit and vegetables, for which we felt a great craving.

Arispe, Sonora.

CHAPTER XII.

FROM ARISPE BACK TO THE COPPER MINES.

Description of Arispe—Primitive church service—Scarcity of grain and fruit and abundance of vegetables—Set out on our return—Broken down wagon abandoned—Reach Fronteras—A blacksmith's independence—Celebration of a Saint's day—Manufacture of aguardiente—Various uses of the Maguay—Doctor's fees—Broken wagon metamorphosed into a cart—Sorry plight of a wild bull—Strike Cooke's road—Traces of fire in the Guadalupe Pass—Mexican encampment—Story of Americans attacked by Apaches—Reach the Copper Mines—Colonel Graham not arrived—Visit General Condé's camp and consult with Lieutenant Whipple—Return to the Copper Mines.

ARISPE was formerly the capital of the State of Sonora; but becoming involved in the civil wars which distracted that State in 1828, the seat of government was in 1832 removed to Ures, where it now remains. In the time of its prosperity, it is said to have contained a population of five thousand inhabitants; but the civil discords and the encroachments of the Indians have reduced it to less than fifteen hundred. The buildings are far superior to any we have seen among the Mexicans, and particularly to those of El Paso. The majority are built of adobe, though there are many of stone. They are all higher than any we have observed elsewhere, and are capped with a projection of brick, besides having a variety of architectural ornaments sufficient to impress one with the former wealth of the place and taste of its people. It is indeed melancholy, to walk through its deserted streets, and see its dilapidated tenements, neglected courts, and closed stores. The only building of particular interest is the church, which was once a fine edifice, but is now fast falling to decay. Its interior is of unpleasing proportions, its length, as in most churches of the frontier where large timber cannot be procured, being too great for its breadth. It contains some fine pictures among the hundred or more that are suspended from its walls. They are all in beautifully carved frames richly gilt; but both pictures and frames are suffering from neglect. The altar is covered with massive plates of embossed silver, and there is a profusion of this metal displayed in the shape of massive flower vases, chandeliers, censers, etc. We attended mass, and found the church filled almost exclusively with women. The music was performed by a band in which clarionets predominated, and we recognized among the tunes several of our popular Ethiopian airs, such as "Dearest May." The singing was performed by two girls, who seemed to have perfected themselves in the art under the tuition of the Chinese.

We find the same scarcity of provisions here as in the other towns we have stopped at, and that it will be impossible to procure any fruits, or vegetables with which to load our teams; at least there are none that admit of transportation. It is not the season for oranges, lemons, pomegranates, or grapes, and we find that there is no dried fruit of any kind. The more substantial articles of food are also scarce and high. Corn is nine dollars the fanega of two and a half bushels, wheat seven dollars, and other articles proportionably high. The reason given for the scarcity is, that for two years past such numbers have emigrated to California that scarcely enough was raised for the consumption of the people. This year they are returning to their senses and their homes, and there is every prospect of an abundance in the fall. The few stores in the place are miserably furnished, their stocks being chiefly dry goods suited to the Mexican market. The only redeeming feature of the place is its gardens; these were evidently established in days of prosperity, and some few are still in tolerable keeping. We passed several hours in strolling through them. Lofty palms lift up their heads of fan-like leaves above the groves of pomegranates, oranges, and lemons. We found apricots in perfection, and the apple, pear, peach, and quince trees full of promise. The quince is said to be the best known in the world, and eatable without cooking. We enjoy here what we have been so long strangers to—fresh vegetables; and from the quantity of peas, beans, etc., consumed by our little party, one would suppose they were storing up a preventive against the scurvy for a year to come. Water is carried about the streets in bags of raw hide. These have a hole at the bottom, and into it a horn is inserted point downwards, which acts as a valve. Two of these bags are slung upon the back of a donkey.

During our stay of three days at this place we received much attention from the officers as well as from several of the citizens. The better class of Mexicans, particularly those of pure Castilian blood, are every where noted for their courteous manners and hospitality. All foreign tourists in Mexico say that they never tasted good chocolate till they drank it here; an assertion in which we fully agreed. It is usually prepared in families from the cocoa-nut, and one accustomed to the Yankee compound of that name would hardly recognize it as the same article. The same curiosity in regard to our culinary and other operations was manifested here as elsewhere by the crowds around our tents. The use of the tooth-brush was looked upon as something very droll, and the taking of a seidlitz powder, a phenomenon in the way of drinking which they could not comprehend. We were again beset here by would-be purchasers, who could hardly be persuaded that we did not come to trade. Like the people of the other towns we had passed, they were in constant fear of the Apaches, and we were told that no one dared venture into the Alameda after dark.

June 3d Set off this morning on our return, in advance of the wagons, which required some slight repairs. We followed as before the bed of the Sonora river, which, in our day's journey of seventeen miles, we crossed and re-crossed fifty-one times. At 12 o'clock, having struck a pleasant spot where there was fine grass, with other necessaries for an encampment, we stopped, believing that it would be quite as far as the teams could come owing to the difficulties of the road. At 5 o'clock the wagons joined us, the mules showing great fatigue.

June 4th. Resumed our journey this morning at half-past five, our route being through the great cañon. Having less cutting to do than before, and being acquainted with the road, we accomplished our task in nine hours, and drove on two miles beyond Bacuachi, where we encamped. In passing the town we endeavored to replenish our stock of eggs; but a single dozen was all the place afforded. The wagons stopped in the cañon, to rest and feed the mules; which prevented their reaching camp till 5 o'clock. Distance travelled fifteen miles.

June 5th. Remained in camp till noon, to repair one of Colonel Craig's wagons, which had received some damage in the cañon. We then set off and pushed on rapidly, over a pretty level and easy road for twelve or fifteen miles, which brought us to the foot of the mountains. Before attempting the passage of the defile, which would be more difficult than it was in coming through, it being now chiefly on the ascent, we doubled the teams at once, putting ten mules to each wagon. All went on very well until we came to a steep hill with a sidelong slant. The carriage led the way; but with all the care of my driver, the mules unable to maintain their position slid on their haunches, and on coming to a narrow turn the tongue snapped off, and the carriage was with great difficulty saved from upsetting. The first wagon that followed was one of my own, driven by Jesus. On coming to the same treacherous place, in spite of all our efforts to prevent it, the wagon slid down, bringing the forward wheel suddenly against a rock, and crushing it almost into atoms; the wagon turned bottom upwards, rolling down the ravine, and scattering its contents as it went. Before the other wagons were suffered to descend, we filled up the lower side of the road as well as we could with stones; then placing a man at the head of each mule, with others to hold back the wagons, let them gradually down in safety.

It was nearly dark, and we were in a narrow gorge of the mountains where there was barely room for the wagons to pass. The whole earth had lately been burned over to the very mountain tops, which were even now throwing up columns of flame and smoke; not a blade of grass was to be seen, no water was near, and there was not a level space sufficient to pitch our tents. To remain here would have been injudicious, and the only alternative was to leave the broken wagon with its contents, which was chiefly corn, and push on to the place where we had encamped on our journey down. By this time Wells, with his usual ingenuity, had managed to splice the tongue of the carriage with his chains and halter ropes. Such articles of value as we did not wish to leave exposed, were placed in the other wagons, and the corn was piled up by the road side. All being ready, Dr. Webb and myself set off on foot, unwilling to burden the carriage in its weak state, as the road continued bad; besides, I felt safer in having my movements under my own control than in threading my way in a wheeled vehicle, through such a defile as we were now passing after dark. The horsemen followed us, and the carriage and wagons came after. In this manner we worked our way slowly along by the dim starlight that glimmered through the forest; for the cañon was thickly overgrown with trees. It was nearly 10 o'clock before we came upon the opening where we had stopped before, and half an hour more brought us to our old camping ground. Few were disposed, after the fatigues of the day, to wait for supper; for my own part, I had walked not less than twelve miles over rugged mountains, and felt that rest would do me more good than eating. The tents were pitched; and after a refreshing cup of tea, which our cook had hastily prepared, we wrapped ourselves in our blankets, and were soon lost in sleep.

June 6th. We lay by to-day to repair damages. The first thing done was to send a man back some fifteen miles, with a mule for the forewheel of a broken wagon which we had noticed in passing; and to dispatch others to the scene of our disaster in the cañon, to bring the wreck of the wagon and its contents to our camp.

I have before spoken of the picturesque spot where we were now encamped, it being the same in which we passed the night of the 27th May; and as we were obliged to stop for a day, we were most fortunate in having reached so desirable a place. I spent the day in wandering about the hills with my gun and sketch book; others who went in pursuit of game got a deer and a turkey. When fatigued with our rambles, we returned and spent a few hours in gathering wild currants which abounded within twenty feet of our tents. Believing we could not make a better use of our *panoche* (sugar) than in preserving the currants, the cook appropriated a large portion of our stock to this purpose.

In the afternoon Jesus arrived with the wheel, which, unfortunately, would not fit our axle. Hoping to repair our damage at Fronteras, now twenty miles distant, we put the corn into the other wagons, and trussed the broken one up in a way that would enable us to get there with it.

June 7th. No event of interest occurred to-day: the broken wagon was brought along very well, and we reached Fronteras early in the afternoon.

June 8th. I applied to a blacksmith the first thing this morning to repair our broken wheel; but as it was some Saint's day, nothing could induce him to work, and he even expressed some doubts about undertaking it on the morrow. In the afternoon the fellow came to my tent, and had the impudence to ask for a couple of dollars to spend at a fandango in the evening, in which case I should have his services on the wheel the next day—of course by paying for them. I was so completely in the fellow's power, for the order of the commandante had no effect upon him, that I gave him the two dollars, and took the risk of getting the work done.

The day was one of great jollity among the whole population; and as they had been for a day or two engaged in distilling mezcal, or aguardiente, from the agave, they succeeded in getting gloriously drunk. But there is a wonderful difference between a Mexican and an Irishman in this predicament. The latter when intoxicated, however mild his natural disposition, becomes frantic and is ready for a fight or any kind of violence. The Mexican, on the contrary, though boisterous, is seldom vicious or troublesome. His desire is then for fun and frolic; and nothing can restrain him from indulging in these as long as he remains under the influence of liquor. Towards night we heard noises approaching, which we finally decided were intended for music. A rabble at length reached our camp, headed by two fellows, sawing lustily upon violins of domestic manufacture. They performed several pieces, among which I noticed "Oh, Susannah," "Dan Tucker," and other popular airs which had probably been introduced by the Sonorians, who had returned from California. Having entertained us sufficiently, one of them stepped forward, and informed us that there was to be a fandango in the evening, and that we were invited to attend. They then gave a few more *morceaux* and left us.

Mezcal, or aguardiente, is a spirituous liquor of great strength, much more so than our strongest whiskey. It is obtained from the bulb or root of the maguay or *agave mexicana*, and is the common alcoholic drink throughout the country. The process of making this liquor is as follows: A hole is first dug some ten or twelve feet in diameter, and about three deep, and is lined with stones. Upon this a fire is built and kept up until the stones are thoroughly heated. A layer of moist grass is then thrown upon the stones, and on this are piled the bulbs of the maguay, which vary in size, from one's head to a half bushel measure, resembling huge onions. These are again covered with a thicker layer of grass; and the whole is allowed to remain until they are thoroughly baked.* They are then removed to large leathern bags, and water is poured on them to produce fermentation. At the end of a week the bags are emptied of the maguay and its liquor, which, after undergoing the process of distillation, is ready for use.

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* My readers in Rhode Island and Massachusetts will notice a strong

But the mezcal is the least important of the uses to which the maguay is applied. When its stem is tapped there flows from it a juice which, on being fermented, produces the *pulque*, a favorite beverage in Central and Lower Mexico, though little known in the Northern States. From the fibres of its massive leaves, which grow to five or six feet in length, and two inches in thickness, is spun a stout thread, which is again doubled, and twisted into ropes. Next, a heavy bagging is made of it, similar to that in which our coffee comes to market. Again, the more delicate leaves are rolled up into balls, and these, on being pounded, form a lather which answers the purpose of soap. It is likewise used to a great extent as a thatch. The younger leaves are eagerly eaten by cattle; and it is said that the minute particles of silica in its stem render it, when cut longitudinally into strips, an excellent substitute for a razor strop. But there is yet another use to which it is applied, viz., as an article of food. For this purpose the bulbs or roots are baked in the ashes, or in the same manner as for making aguardiente, and the outer skin stripped off. It is then sweet, and rather pleasant to the taste, and is extensively used by the Indians on the Gila as well as by

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resemblance to their manner of baking clams; the only difference being that for the clams, they use the wet sea-weed, when the Mexicans use the green grass.

the Mexicans on the Rio Grande, who are too lazy to cultivate the soil and raise corn. The engineers attached to the Commission told me that the entire Mexican population at Presidio del Norte, consisting of a thousand souls, had no other food for more than six months.*

June 9th. In camp at Fronteras. The people crowded around us as on the previous visit, some to see the doctor, and others the cook. The doctor found the bread he had cast upon the waters returning; bottles of aguardiente, cakes of sugar, and piles of tortillas, came to him at the hands of the señoras and señoritas in such profusion as to excite the envy of the young gentlemen of the party, many of whom applied for the office of hospital steward with the hope of sharing some of the perquisites. But how shocked were the good people when they saw to what base purposes their precious aguardiente was converted. The doctor, although he received the liquor readily enough, had no idea of applying it to the purposes intended by the donors, but used it for preserving his beloved lizards, frogs, fishes, and other specimens in natural history. As it would have been useless to attempt explaining to his patrons his object in collecting and preserving these ill-favored reptiles, they were permitted to rest in the belief that he was making of them some decoction for medicinal purposes.

June 10th. In Fronteras. A wild bull was sent to us to-day by Captain Gomez, which furnished us with all the fresh meat we required to carry us home. It is true we had on hand a stock of dried beef; but nothing short of dire necessity could induce us to touch it. The wheel being at length completed, though in a very bungling manner, we made preparations to resume our journey in the morning.

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* I afterwards saw the agave used as food by the Apaches, the Pimos, the Coco Maricopas, and the Diegenos, on the shores of the Pacific.

June 11*th*. Took an early start, and moved rapidly over the first portion of the road, which was quite smooth, and arrived at the mountain called *Cavoyan*, around the eastern end of which we had to pass to reach the valley of the Agua Prieta. On examining the damaged wheel, I found it in a dubious condition, the spokes having all worked loose. We strengthened it as well as possible, by inserting new ashen spokes, and lashing all together with raw hide; and then pushed on, driving over the hills as carefully as possible. We had scarcely proceeded a mile, however, when, on coming to an uneven place, the wheel crushed down, splitting spokes and hub to pieces, and overturning the wagon, which deposited its contents on the ground in all directions. As the little stream which takes its rise at the Agua Prieta was but a few rods from us at the time, we selected a spot in a grove of cotton-woods, and stopped there for the night.

A further examination of the wheel showed that it was impossible to mend it, and that it must be condemned and abandoned. In order to make the most of the wreck, we took off the hind wheels and put them on the forward axle; then, by sawing the box in two, the vehicle was converted into a cart. On this we placed the corn, and distributed the rest of the load among the other wagons.

We passed many wild cattle to-day. In one place a large bull was seen mired by his hind legs, which were sunk deep in the mud, while his free legs were on hard ground. The poor creature had evidently been in this situation several days; and the crows, buzzards, and wolves had already marked him as their prey. As we approached him the wolves scampered off. The buzzards had actually commenced work on his flanks, which they had dreadfully lacerated, so that the blood was trickling down his haunches. To end the misery of the suffering animal, a ball was put through his heart by one of the party. About half the night was spent in getting our new vehicle ready.

June 12th. Got an early start, and retracing our steps up the valley of the Agua Prieta, reached that spring, ten miles distant, at eight o'clock, where we stopped to water. Found a wild bull here, which appeared to have been wounded in his hind quarters. He seemed quite disposed to give us battle; and fearing he might charge upon the train, and stampede the mules, I thought it the wisest course to give him room. Soon after, we struck Cooke's California road, which presented a striking contrast with the rough and trackless region we had been traversing for more than a hundred miles. It was here perfectly smooth; and from our late gait of a slow walk, we were enabled to move off on a trot, thus reaching San Bernardino at two o'clock, four and a half hours from Agua Prieta.

June 13th. Starting fresh, we hastened over the plateau, and soon entered the cañon in the Guadalupe Pass, which had so charmed us by its luxuriant vegetation and picturesque beauty. But what a change had taken place! A fire had passed over it, destroying all the grass and shrubbery, and turning the green leaves of the sycamores into brown and yellow. The surface of the earth was covered with black ashes, and we scarcely recognized it as the enchanting place of our former visit. At first we feared that this devastation had been caused by our own neglect; but on reaching the spot where we had encamped, which was separated from the surrounding hills by the rocky bed of the stream, we found the dry grass still around the place, which alone had escaped the fire. A little further on we came to a camp of two hundred Mexican soldiers, a portion of the brigade of General Carrasco. They told me that General Carrasco had been to Janos; and hearing that a party of Americans bound for California had been attacked on the road leading from Janos to Guadalupe Pass, he divided his force with the view of intercepting the marauders. He himself had taken the Babispe route, to the south of us. The party we met had with them a large number of pack mules, transporting arms and ammunition from Janos to Fronteras and Arispe, having been sent to the former place by wagons from the city of Mexico.

The particulars of the attack, as related to me by these men, were, that a party of ten Americans, with two wagons, was fired upon by a band of Apaches lying in ambush; that one was killed and three wounded, when the remainder cut loose the mules (each mounting one), abandoned their wagons, and escaped to Janos. They said the wagons were still there, as well as some of their contents. They showed us some salt pork which they had taken themselves—an article which forms no part of a soldier's rations in Mexico.*

We gave the Mexican officers a quarter of our fresh beef. It was evident now how the fire which I have mentioned originated. A portion of the brigade had passed the cañon a few days after us; and their twenty or thirty camp fires had, no doubt, communicated the flames to the grass, which had afterwards extended over the whole mountain.

At two o'clock we reached the worst portion of the Guadalupe Pass, where the great and sudden rise takes place. We attempted to double the teams, but found that no more than four mules could be used to advantage, owing to the short turns in the road. The getting up these hills proved a very difficult task, and it was only by every one putting a shoulder to the wheels and chocking them at every five or six feet, that they could be surmounted. It was dark when we reached the small stream seven miles beyond, which, though full when we passed, now furnished scarcely water sufficient for our mules.

June 14th. The road being good, we completed our day's journey by 2 o'clock, P. M., and encamped on the banks of the arroyo where we had nooned before.

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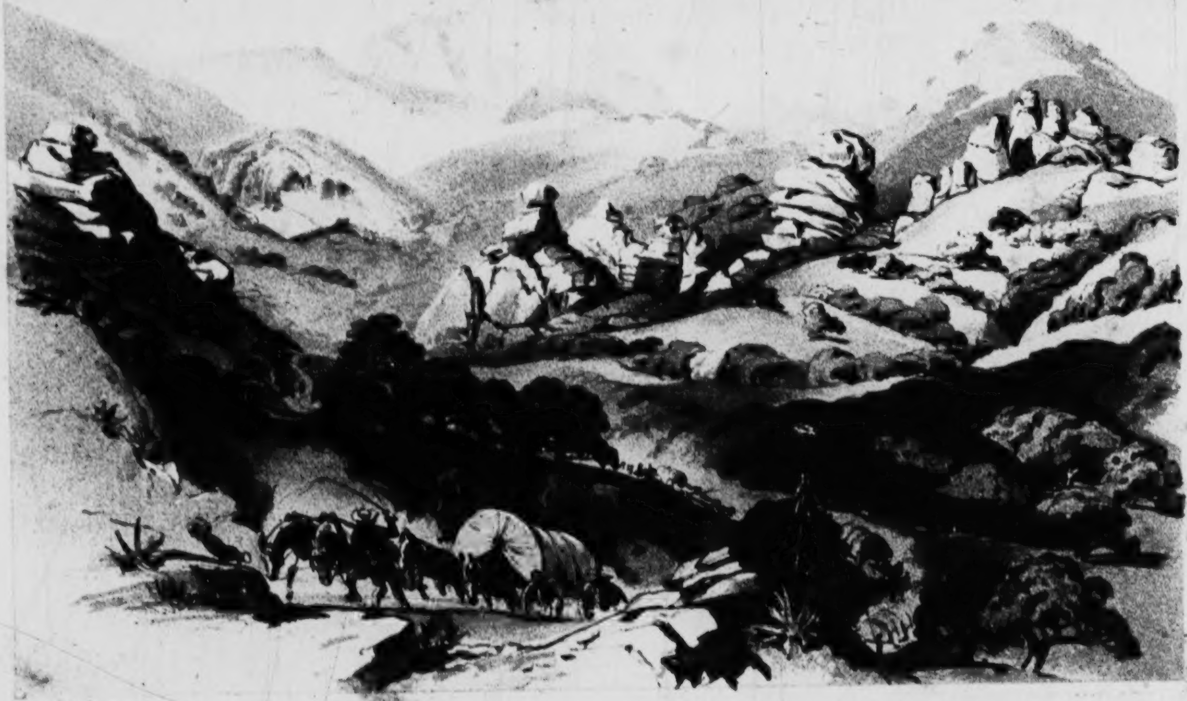
* This statement was found to be true on our return to the Copper Mines, where news had been sent from Janos; and on leaving for California, two months later, I took with me a man who had been in the affray, and substantiated what had been related to us by the Mexican soldiers. On returning from California a year later we saw on the spot where this affair took place the skeleton of a man.



GUADALUPE PASS/ SONORA

The stream was now dry, but water was found in the spring near at hand.

June 15*th*. In crossing the ridge of hills which separated us from *Las Playas*, the cart took a side lurch and broke down, every spoke giving way and the wheel crushing to pieces. As the accident was past remedy, the contents of the cart were distributed among the wagons, and we hastened on, reaching Las Playas at noon. Here the grass and water was so good that we remained until 4 o'clock, when we pushed on in order to accomplish that night as much as possible of the long distance of fifty-two miles that lay before us without water. Kept on till 10 o'clock, P. M., when we encamped on the arid plain.

June 16*th*. The road being excellent, an early start and fast driving brought us to Ojo de Vaca, by 2 o'clock, P. M. There was scarcely grass enough here to give our animals a feed, which was accounted for by one of our trains having stopped here on its way from the Copper Mines to Janos.

June 17*th*. Left at 3 A. M. and rode to Pachetehú, nineteen miles, where we gave the animals a little rest, and took breakfast. Resuming our journey, we pushed forward and reached the Copper Mines before noon, finding our party much alarmed at our long absence.

A mail had arrived in the mean time, bringing a large budget of letters and newspapers; but to my great disappointment, nothing was heard of Colonel Graham. The engineers, with their assistants, were still waiting, and could not enter the field until he arrived.

June 20*th*. Deeming it necessary that some steps should be taken in consequence of the continued absence of Colonel Graham, without whom, or his assistants, I could not send another astronomical party into the field, I determined to visit the camp of Lieutenant Whipple, who I had been informed had reached the Mimbres with his advanced parties, to consult with him as to future operations. I accordingly left this morning, accompanied by Lieutenant Green, and Messrs. Cremony, White, and Jones. Reaching the Mimbres, we followed it down about twenty-eight miles below the Copper Mines, when at evening we arrived at the camp of General Condé and the Mexican Commission. There I learned that Lieutenant Whipple was encamped on the plain near Cooke's Spring, eighteen miles distant; so I concluded to go no further, but send for him to join us at General Condé's camp.

June 21*st.* Lieutenant Green and Mr. Cremony set off this morning after Lieutenant Whipple. I remained in camp under a bower of bushes, keeping as quiet as possible during the day, as the heat was too intense to admit of stirring about. The general and his party had found these bowers so much more comfortable than their tents, that they had constructed several, in which they remained during the day, resorting to their tents only at night, or at meal times. The river near where the party was encamped was entirely dry, and water could be procured only by digging in its bed. A little pool remained, where the animals were watered. In the evening Lieutenant Whipple, accompanied by Mr. Salazar, the Mexican chief astronomer and surveyor, Lieut. Green, and Mr. Cremony, arrived.

June 22*d.* We held a consultation to-day relative to the parties for the survey of the Gila, which General Condé was most anxious to commence at once. Our surveying parties had long been organized, and were ready; but we had no astronomical corps to send with them, without which, it would not be proper to undertake so important a work. Lieutenant Whipple was making rapid progress with his survey of the line west from the Rio Grande; and he believed it best, as we had now waited so long, to defer further action until Colonel Graham should arrive.

June 23d. To avoid the heat of the day, we set out on our return at 2 o'clock, A. M., and reached the Copper Mines at nine.

CHAPTER XIII.

INCIDENTS AT THE COPPER MINES.

Visit from the Apaches—Mangus Colorado—Arrival of Mr. Sanford—11th Article of the treaty relating to captives—Arrest of New Mexican traders—Inez Gonzales the Mexican captive—Examination of traders—Story of the captive girl—Pinaleños Indians—General Condé arrives—The 11th Article of the treaty enforced—Friendly intercourse with the Indians—Two Mexican boys taken from them—Excitement in consequence——Conference and dialogue with the Apache chiefs—Amicable settlement of difficulties.

On the day of my return from Sonora, the first Apache Indians we had seen paid us a visit, headed by their head chief, Mangus Colorado, or Red Sleeve. He was accompanied by twelve or fifteen of his tribe, and said he had followed us for several days; that his people had seen us when we went down to Sonora, and were several times near our encampments on the journey. He said they knew my carriage, and that we belonged here. He thought we ran a great risk in going so far with so small a party; as there were many bad Indians prone to theft and murder in the country through which he passed, and whom he could not control. He said he was a friend of the Americans, and that his people desired to be at peace with us. He remembered General Kearney and Colonel Cooke, when they passed through this country a few years before. I explained to him the war between the United States and Mexico, and its results, all of which he pretty well understood already. I told him that we had now come out to see this country, and mark the line that separated the territory of Mexico from that acquired by the United States; that all the Indians who lived on our side of the border, would have our protection as long as they conducted themselves properly and committed no thefts or murders; but that if they stole any mules or cattle belonging to the Americans, we should pursue and punish them; and by our treaty with Mexico, we were bound to extend to her people the same protection. Our protection of the Mexicans he did not seem to relish; and could not comprehend why we should aid them in any way after we had conquered them, or what business it was to the Americans if the Apaches chose to steal their mules, as they had always done, or to make wives of their Mexican women, or prisoners of their children. I told them the Americans were bound to do so and could not break their word; and if they (the Apaches) committed any farther depredations on Mexico, we should not shield them from the consequences. Mangus Colorado denied that he had ever injured the Americans; and when I told him I had learned that some of his people had lately attacked a party of our countrymen on their way to California, and killed one man, he pretended to know nothing about it On a subsequent interview I brought this affair again to his notice, when it appeared that he was acquainted with it, but said it was done by some bad people living in a certain mountain range, over whom he had no authority. He promised that his people should not trouble us or the Mexican Commission, and that he would send back any mules or cattle that might be taken by his young men; and furthermore, if any strayed away, he would have them caught and sent back to us. I then informed him and the other chiefs, that to show our good feelings towards them, I would make them some presents, and accordingly directed the Commissary to distribute among them some shirts, cotton cloth, beads, and other articles, which pleased them much. They asked for whiskey, which I positively refused, denying that I had any. Although this was the simple truth, they did not believe it, not being able to imagine how a party of Americans could be without that indispensable article.* They were constantly on the look-out for it, and when they saw a bottle they asked if it did not contain the coveted liquor. I one day handed them a bottle of catsup and another of vinegar, and told them to ascertain for themselves. A taste put a stop to their investigations, and they were afterwards less inquisitive. On one occasion a party of Indians were found to be drunk shortly after coming in, which induced me to believe they had obtained liquor somewhere about our camp; but of whom, or where, I could not ascertain, as all denied having given it to them I communicated the fact to Colonel Craig, who was equally determined with myself to put a stop to the practice. He believed he could trace it to the sutler's shop; and finding a barrel of whiskey there, he took possession of it and had it transferred to the Commissary's depot.

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* In all my intercourse with the Indians, during the two and a half years I was in their country, I never gave one of them a drop of ardent spirits. I also prohibited others from doing so; but on a few occasions, had reason to suspect that my orders were disobeyed.

On the 24th June, Mr. S. P. Sanford, bearer of dispatches, arrived from Washington, and brought me the pleasing news that Colonel Graham, for whom we had so long been waiting, had probably reached El Paso on that day, accompanied by several officers.* Great joy was felt by all at this prospective termination to our inactive state. Many of the engineers and assistants had now been attached to the Commission ready for duty seven months, without having yet taken the field.

On the 27th June an incident occurred, which will long be remembered by every one connected with the Boundary Commission. It was such as to awaken the finest sympathies of our nature; and by its happy result afforded a full recompense for the trials and hardships attending our sojourn in this inhospitable wilderness.

On the evening of the day alluded to, a party of New Mexicans came in for the purpose of procuring provisions, &c., having with them a young female and a number of horses and mules. By what dropped from them in the course of conversation, it was ascertained that the female and animals had been obtained from the Indians; and that they were taking the girl to some part of New Mexico, to sell or make such disposition of her as would realize the most money. As all traffic of this kind, whether in mules or captives, was strictly prohibited by the treaty with Mexico, I deemed it my duty, as the nearest and highest representative of the government of the United States in this region, to interfere in the matter. My authority for so doing is contained in the second and third sections of the eleventh article of the treaty of Guadalupe Hidalgo referred to, where it is declared that—

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* On the 30th June I received a note from Colonel Graham, announcing his arrival at El Paso on the 24th.

"It shall not be lawful, under any pretext whatever, for any inhabitant of the United States to purchase or acquire any Mexican, or any foreigner residing in Mexico, who may have been captured by Indians inhabiting the territory of either of the two Republics, nor to purchase or acquire horses, mules, cattle, or property of any kind, stolen within Mexican territory by such Indians.

"And in the event of any person or persons, captured within Mexican territory by Indians, being carried into the territory of the United States, the government of the latter engages and binds itself, in the most solemn manner, so soon as it shall know of such captives being within its territory, and shall be able to do so through the faithful exercise of its influence and power, to rescue them and return them to their country, or deliver them to the agent or representative of the Mexican government. The Mexican authorities will, as far as practicable, give to the government of the United States notice of such captures; and its agent shall pay the expenses incurred in the maintenance and transmission of the rescued captives, who, in the mean time, shall be treated with the utmost hospitality by the American authorities at the place where they may be.

But if the government of the United States, before receiving such notice from Mexico, should obtain intelligence through any other channel of the existence of Mexican captives within its territory, it will proceed forthwith to effect their release and delivery to the Mexican agents, as above stipulated."

With this authority before me I addressed a note to Lieut. Colonel Craig, commander of the escort, requesting him to demand the surrender of the female, and to prohibit the men, who intended departing at early dawn, from leaving their encampment until further orders. This request, which was made late in the evening, was promptly complied with under the immediate directions of Lieutenant D. C. Green.

The ensuing day the three principal traders of the party were brought up to the fort, and separately examined, in reference to the manner in which they had obtained, and the right they had to the possession of, the captive girl and the animals. These three persons were Peter Blacklaws, a trader in Santa Fé, Pedro Archeveque, a laborer of Algodones, and José Faustin Valdez, a laborer of Santa Fé.

Their evidence was somewhat conflicting—more particularly with respect to the female. It appeared there was a party of about fifty men who had been trading with the Indians north of the Gila; a portion of them still remained there, whilst another portion (about twenty) were here, on their way back to Santa Fé. The whole had been trading under *one and the same license*, although it was acknowledged that the name of none of them, save Peter Blacklaws, was inserted in it; he, however, declared that he was authorized—which is hardly probable—to add to his party as many as he chose. This license was called for, but not produced, it being, as was stated, in the possession of the other portion of the party. They seemed to consider themselves fully authorized, by virtue of the license, to purchase any species of property held by the Indians, and this without any regard to the manner in which the latter obtained it. They seemed surprised that I should question their rights on the strength of a treaty, the stipulations of which they knew nothing about.

As respects the captive girl, who it was acknowledged was bought of the Piñal Indians, even placing their conduct in the most favorable light, it is quite apparent that she was purchased, like any other article of merchandise, as a matter of speculation. According to part of the testimony, the expedition was fitted out for the express purpose of buying her; while others declared that the purchase was an incidental matter. It appeared that her apprehensions at being taken by these men still further from her home, instead of being restored to her natural protectors, had been quieted by assurances that her purchaser was acquainted with relatives of hers in Santa Fé; although his testimony showed, as might have been anticipated, that he had no such acquaintances at all.

The girl herself was quite young, artless, and interesting in appearance, prepossessing in manners, and by her deportment gave evidence that she had been carefully brought up. The purchaser belonged to a people with whom the system of peonage prevails, and among whom, as a general thing, females are not estimated as with us, especially in a moral point of view. The fate that threatened her under these circumstances, being too apparent, I felt under no necessity of regarding the protestations of Blacklaws, as to the honesty of his intentions, inasmuch as the treaty prohibits purchases of this kind "*under any pretext whatever.*" I therefore deemed it to be my duty—and a pleasant one it certainly was, to extend over her the protection of the laws of the United States, and to see that, until delivered in safety to her parents, she should be "treated with the utmost hospitality" that our position would allow.

The substance of the following brief statement was furnished by this young captive:

Her name is Inez Gonzales, daughter of Jesus Gonzales, of Santa Cruz, a small frontier town, near the River San Pedro, in the State of Sonora. She was then in the fifteenth year of her age. In the September preceding she had left her home, in company with her uncle, her aunt, another female, and a boy, on a visit to the fair of San Francisco, in the town of Madelena, about 75 miles distant. They were escorted by a guard of ten soldiers, under the command of an ensign named Limon. When one day's journey out, viz., on the 30th of September, 1850, they were attacked by a band of Piñol Indians, who lay in ambush in a narrow wooded cañon or pass. Her uncle was killed, and all the guard, save three persons, who made their escape. She with her two female companions, and the boy, Francisco Pascheco, were carried away into captivity. She has been with the Indians ever since. The other captives she understands were purchased and taken to the north by a party of New Mexicans who made the Indians a visit last winter. No improper freedom was taken with her person; but she was robbed of her clothing, save a skirt and under linen, and was made to work very hard. She spent the whole period of her captivity at two of the regular rallying spots or planting grounds of the Piñols.

This tribe is also known as the Piñal, or Pinaleños. embraces about five hundred souls, and ranges over an extensive circuit between the Sierra Piñal and the Sierra Blanca, both of which mountains are near the Upper San Francisco River, about five days' journey north of the Gila.* Within this space the young girl knew of at least twelve female captives, besides numerous males. Generally, the Indians are very willing to sell, that being their object in making the captures. The men spend their time in hunting and depredating; and the women are required to do all the work in their wigwams and generally in the field. All females in this respect being treated alike, their own faring no better than captives. Their food consists almost exclusively of the root of the maguay, baked as I have before described.

I never saw any of the Piñal Indians, though a band was met by one of the surveying parties on the Gila. They were described to me as a fine looking people. At first they were shy; but when they discovered that our party were Americans, and were well disposed towards them, they became quite friendly. On inquiring of the Apache Chiefs concerning them, I learned that they belong to the same great tribe, but seldom have any intercourse with the Apaches proper, being separated from them by broad deserts and lofty mountains.

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* There are two streams by this name on Emory's map, which empty into the Gila; I refer to the eastern one. The western one is known on the Spanish maps as the Rio Verde, or Ascencion.

General Garcia Condé, the Mexican Commissioner, being encamped about twenty-six miles off, I dispatched a messenger to him requesting his presence, to advise and co-operate with me in this matter. He accordingly visited me, and, upon inquiring, found that he was acquainted with the released captives's father, a respectable citizen of Santa Cruz. He approved warmly of my course, evincing, as it would, to his government a determination on the part of the United States to solemnly and faithfully fulfil its treaty stipulations. He also particularly solicited that the young woman should be kept under my protection until such time as she could be restored in safety to her home.

The fair captive was of course taken care of by the Commission. She was well clad with such materials as the sutler of the escort and the commissary of the Commission could furnish; and besides the more substantial articles of clothing provided for her, she received many presents from the gentlemen of the Commission, all of whom manifested a deep interest in her welfare, and seemed desirous to make her comfortable and happy. But with all the attentions extended to her, her situation was far from enviable in a camp of over a hundred men, without a single female with whom she could hold any intercourse. She found employment enough in making her own garments, being quite expert at her needle, and occasionally spent an hour in reading the few Spanish books in our possession.

Another incident upon which the 11th article of the Treaty of Guadalupe Hidalgo has a direct bearing, occurred on the day succeeding that of the event just related.

Ever since my return from Sonora, the Apaches, with their chiefs, women, and children, had been daily visitors to the Copper Mines, and to our several encampments. The most friendly feelings had been manifested by them; and in return, we had not failed to let them know that it was for their interest to be at peace with us, and, as far as lay in their power, to restore to us any mules or cattle that strayed away. An additional evidence that there was a sincerity at the time in our Apache friends was the freedom with which their women and children visited our camps and quarters. They had themselves encamped about four miles from us, and had with them large herds of horses and mules.

On the day referred to, when a large party of the Apaches were in, two Mexican boys suddenly rushed into the tent of Mr. Cremony, which was pitched in the outskirts of the place, and sought his protection from their Indian captors. He at once brought them to my quarters; and, on being questioned, they stated that they had been stolen from their homes by the Apaches. One, named Saverro Aredia, and about thirteen years old, had been taken from the town of Bacuachi, in the State of Sonora, six months before; the other, José Trinfan, ten or twelve years of age, belonged to Fronteras, in the same State, and had been held a prisoner six years. Believing, from what they had heard the Indians say, who had visited the Copper Mines, that they would find protection with us, they sought our camp. They were both intelligent looking boys; their hair was cropped short, and they were entirely naked.

When these youths were brought to me, Mangus Colorado and Delgadito, two prominent chiefs of the Apaches, and a number of their tribe, were present; they already knew of the escape of the prisoners, and at once proposed that I should purchase them. I declined, telling them that the Americans did not buy captives; and furthermore, that having sought my protection, I should not deliver them up. In vain I endeavored to make the chiefs comprehend our treaty with Mexico, and the principles of justice and humanity on which it was based. They did not, or would not, understand, and left our camp evidently much offended. I requested Mangus Colorado to come to me on the following day, when I would endeavor to satisfy him. The day arrived, but Mangus did not appear; and I began to be fearful that the friendly feeling which existed between the Commission and the Indians would be terminated by this event. I received intimations that the boys were not safe, and that an attempt would probably be made to recapture them the first opportunity. Determined not to be thwarted in this way, I sent them off at night, well clothed, in charge of four resolute men, with directions to take them to the camp of General Condé and deliver them into his hands.

After the lapse of several days, the chiefs with their people, including the owner of one of the boys, again made their appearance. The matter was again talked over, but nothing was decided, and they returned to their camps. After several fruitless conferences of this sort, the affair was at length so arranged that the captives should be retained by us, and our friendly relations not be impaired. As this last discussion was one of much interest, it was taken down by one of the gentlemen present. I give it therefore at length, as the arguments used by my opponents display to good advantage their natural shrewdness of character. It was commenced by Mangus Colorado, who thus addressed me:

Mangus Colorado.—Why did you take our captives from us?

Commissioner.—Your captives came to us and demanded our protection.

Mangus Colorado.—You came to our country. You were well received by us. Your lives, your property, your animals, were safe. You passed by ones, by twos, and by threes, through our country; you went and came in peace. Your strayed animals were always brought home to you again. Our wives, our children, and women, came here and visited your houses. We were friends! We were brothers! Believing this, we came amongst you and brought our captives, relying on it that we were brothers, and that you would feel as we feel. We concealed nothing. We came not here secretly or in the night. We came in open day and before your faces, and we showed our captives to you. We believed your assurances of friendship, and we trusted them. Why did you take our captives from us?

Commissioner.—What we have said to you is true and reliable. We do not tell lies. The greatness and dignity of our nation forbids our doing so mean a thing. What our great brother has said is true, and good also. I will now tell him why we took his captives from him. Four years ago, we, too, were at war with Mexico. We know that the Apaches make a distinction between Chihuahua and Sonora. They are at peace with Chihuahua, but always fighting against Sonora. We in our war did not make that distinction. The Mexicans, whether living in one or the other State, are all one nation, and we fought them as a nation. Well, when the war was over, in which we conquered, we made peace with them. They are now our friends, and by the terms of the peace we are bound to protect them. We told you this when we came to this place, and we requested you to cease your hostilities against Mexico. Well, time passed, and we grew very friendly; every thing went well. You came in here with your captives. Who were these captives? Mexicans—the very people we told you we were bound to protect. We took them from you and sent them to General Garcia Condé, who will set them at liberty in their own country. We mean to show you that we cannot lie. We promised protection to the Mexicans, and we gave it to them. We promise friendship and protection to you, and we will give it to you. If we had not done so to Mexico, you could not have believed us with regard to yourselves. We cannot lie.

Ponce.—Yes, but you took our captives from us without beforehand cautioning us. We were ignorant of this promise to restore captives. They were made prisoners in lawful warfare. They belong to us. They are our property. Our people have also been made captives by the Mexicans. If we had known of this thing, we should not have come here. We should not have placed that confidence in you.

Commissioner.—Our brother speaks angrily, and without due reflection. Boys and women lose their temper, but men reflect and argue; and he who has reason and justice on his side, wins. I have no doubt but that you have suffered much by the Mexicans. This is a question in which it is impossible for us to tell who is right, or who is wrong. You and the Mexicans accuse each other of being the aggressors. Our duty is to fulfil our promise to both. This opportunity enables us to show to Mexico that we mean what we say; and when the time comes, we will be ready and prompt to prove the good faith of our promises to you.

Ponce.—I am neither a boy nor a squaw. I am a man and a brave. I speak with reflection. I know what I say. I speak of the wrongs we have suffered and those you now do us. (Very much excited.) You must not speak any more. Let some one else speak (addressing himself to Mr. Cremony, the interpreter).

Commissioner.—I want you to understand that *I* am the very one to speak; the only one here who can speak (peremptorily). Now do *you* sit down. I will hold no more talk with you, but will select a *man* (beckoning to Dalgadito). Do you come here and speak for your nation.

Dalgadito.—Let my brother declare the mind of his people.

Commissioner.—I wish to explain to our Apache brethren the reasons that have actuated us in this thing, and what we can do for the master of these captives. We know that you have not done this thing secretly, or in the dark. You came as braves in open day, and brought your captives amongst us. We are obliged to obey the orders of our great chief in Washington as much as you warriors are obliged to obey your commanders. The great chief of our nation says: "You must take all Mexican captives that you meet among the Apaches, and set them at liberty." Now this you must know we cannot disobey. For this reason we have taken your captives from you.

Dalgadito.—We do not doubt the word of our brave white brethren. The Americans are braves, *we know it*; and we believe a brave scorns to lie. But the owner of these captives is a poor man; he cannot lose his captives, who were obtained at the risk of his life, and purchased by the blood of his relatives. He justly demands his captives. We are his friends, and we wish to see this demand complied with. It is just, and as justice we demand it.

Commissioner.—I will now tell my Apache brethren what can be done for them. The captives cannot be restored. The Commissioner cannot buy them, neither can any American buy them; but there is here in our employ a Mexican who is anxious to buy them, and restore them to their homes. We have no objection that this Mexican should do so; and if he is not rich enough, some of us will lend him the means.

Dalgadito.—The owner does not wish to sell; he wants his captives.

Commissioner.—I have already told my brother that this cannot be. I speak not with two tongues. Make up your minds.

Dalgadito.—The owner wants twenty horses for them.

Commissioner.—The Apache laughs at his white brother! He thinks him a squaw, and that he can play with him as with an arrow! Let the Apache say again.

Dalgadito.—The brave who owns these captives does not wish to sell. He has had one of those (two) boys six years. He grew up under him. His heart-strings are bound around him. He is as a son to his old age. He speaks our language, and he cannot sell him. Money cannot buy affection. His heart cannot be sold. He taught him to string and shoot the bow, and to wield the lance. He loves the boy, and cannot sell him.

Commissioner.—We are sorry that this thing should be. We feel for our Apache brother, and would like to lighten his heart. But it is not our fault. Our brother has fixed his affections on the child of his enemy. It is very noble. But our duty is stern. We cannot avoid it. It wounds our hearts to hurt our friends; but if it were our own children, and the duty and the law said, "Part with them," part with them we should. Let our Apache brother reflect, and name his price.

Dalgadoto.—What will you give?

Commissioner.—If my brethren will come with me I will show them.

Here the council dissolved and repaired to the commissary's stores, attended by the Mexican purchaser, where goods to the amount of two hundred and fifty dollars were laid out, which they accepted, and thus the business was concluded.*

Under no other circumstances would I have been instrumental in remunerating these Indians for their captives: but in the present state of the Boundary Survey, this affair, had it not been amicably adjusted, might have proved a most serious obstacle to the prosecution of our duties.

The Indians remained encamped on both sides of us in large force. Mangus Colorado with his band, being on the west about four miles off, and Dalgadito at the distance of eight miles near the Mimbres, where, on account of the superior grass in the valley of that stream, the greater portion of our horses and mules were kept. It was therefore completely in the power of the Indians to drive them all off, if they were so disposed. In promising them our friendship, I told them that they must deserve it by protecting our animals; and if unfriendly Indians should attempt to steal them, they must restore them to us. This they promised to do, and they faithfully adhered to their undertaking. Once, some of our animals were stolen, and on several occasions they strayed away; but in every instance the Indians brought them back, and sometimes at the expense of much labor and trouble to themselves.

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* These boys were not detained a moment at the camp of the Mexican Commissioner, but sent to Janos, the nearest military post in Mexico, from whence they were taken to their families.

CHAPTER XIV.

INCIDENTS AT THE COPPER MINES.

Intercourse with the Apaches—Mangus Colorado and his new clothes—Proper mode of treating Indians—Treachery and Massacre of Indians, by an Englishman—Tribe of Copper Mine Apaches—Their numbers—Extent of their incursions—Ethnological Position—Inferiority of the Tribe—Dress—Visit from the Navajoes—Their Fine Blankets—An Apache shot by a Mexican—Alarm—Arrest and Examination of Prisoner—Death of the Indian—The Murderer demanded by the Apaches—Conference with the Chiefs, and their Talk—Restoration of Friendship.

AFTER the pleasant termination of our difficulty with the Apaches relative to the captive boys, they continued their daily visits as before, and were subject to no restraint. They always made their first calls on Colonel Craig, who treated them with the greatest kindness, or myself; after which they strolled about visiting the quarters or tents of the others, or watching the several mechanics in their labors. I had a full suit of blue broadcloth, made for Mangus Colorado, and gave all his family clothing besides. Some of his children, of which, I think he had nine, generally accompanied him, and always received some little knick-knacks to take back with them. Mangus was mightily pleased with his suit, which consisted of a frock coat lined with scarlet and ornamented with gilt buttons. His pantaloons, at his request, were open from the knee downwards, after the fashion of the Mexicans, with a row of small fancy buttons on one side, and a broad strip of scarlet cloth on the outer side from the hip downwards. A white shirt and red silk sash completed his dress. While the tailor had it in hand, he visited him daily to watch its progress, and a child might have envied him his delight. But in putting them on, his Indian character was most strikingly displayed. He insisted on wearing his shirt outside of his pantaloons; and all my efforts to induce him to reverse the arrangement were without effect. The reluctance of all Indians to conform to our customs with regard to dress is well known; and it is only after many years of constant intercourse that the men will wear their shirts as we do. The women adhere with equal tenacity to some of their customs. They prefer the leggin and blanket to any other dress; and even after they have become completely domiciliated among us, as is the case with the Iroquois tribes in the State of New-York, they refuse to give up their broad-brimmed hats and feathers.

I often invited the chiefs, and in particular Mangus Colorado, to dine with me. On these occasions their conduct was marked with as much decorum as though they had been used to civilized society all their lives; though it is true, they sometimes exhibited a curiosity to understand the nature of the dishes that were placed before them, and generally wished to have a taste of every thing. After a little while they showed a disposition to take more liberties; and when my guest had finished his meal, he managed to leave his plate pretty well filled, and beckoned to another to take his seat. This was submitted to once or twice; after which, finding it encroached too much on my supply, I no longer invited any to my table. I was willing to give a place to a chief occasionally; but to have half a dozen hungry fellows standing outside waiting to take their turn, was more than I was able or willing to put up with. They knew that we had killed several bears, and that we ate their flesh. They always asked if we had bear on the table, for they wished to avoid it, but, with our cooking, could not tell it from beef. I never deceived them, nor urged them to eat bear's meat. I found they had some superstitious prejudice against it, but could never prevail on them to tell me what it was.

During this time the members of the Commission went about freely in small parties or alone, for twenty or thirty miles around our camp, and were on no occasion molested. They also visited the Apache camps, where they were well received. Our wagons with stores, went unprotected to and from the Surveyors, and their attendants, who were scattered in small parties for fifty miles along the line, where the escort could afford them but little protection. Hence the great importance to the success of the Commission in maintaining friendly relations with these Indians.

My experience established the truth of the opinion I had always entertained, that kind treatment, a rigid adherence to what is right, and a prompt and invariable fulfilment of all promises, would secure the friendship of the Apaches, a tribe of Indians which has the reputation of being the most hostile and treacherous to the whites of any between the Rio Grande and the Pacific. It is the conduct of unprincipled traders and emigrants, who sow the seeds of intemperance and vice among them, which has created most of the difficulties before experienced. These men defraud them of their property, and, on the slightest pretence, take their lives. That the Indians feel the deepest hatred towards the Mexicans is true, and they certainly have reason for entertaining a strong antipathy to that people. Acts of treachery of the grossest and cruelest description have been practised by the Mexicans towards them; and, though years have passed away since these events occurred, they are not forgotten by the Apaches. The desire of revenge, or as we should term it in our own case, of retributive justice, seems, instead of diminishing, to acquire increased intensity, with the lapse of time. But bad as the conduct of the Mexicans may have been towards these Indians, they never were guilty of a more fiendish act than one perpetrated on them by an Englishman, some twelve or fourteen years ago, in the northern part of Sonora. The particulars as related to me are briefly these: and having heard them both at El Paso, and at Arispe, I have no doubt of their correctness. It seems that in consequence of the depredations of the Indians, the State of Sonora offered a premium of one hundred dollars for each Apache scalp. A disgrace to his nation, named Johnson, actuated by the reward, induced a large party of Apaches, men, women and children, to assemble around a quantity of goods, which he had brought among them ostensibly for the purpose of trade. He had concealed beneath some saddles and flour bags, a cannon heavily loaded with shot and a piece of chain, near which was stationed a man, pretending to smoke. At a signal given by Johnson, this man suddenly uncovered the breech of the gun and touched it off, the rest of his party at the same time discharging their small-arms among the terrified Indians, who fell on every side. When the survivors had collected their senses, and saw the Americans preparing for another volley, they rallied, and being the larger party, put Johnson and his crew to flight. A skirmish afterwards took place, in which the Indians met with further loss. After so base and villainous an act, it is not suprising that the Apaches look upon all white men as their enemies, whether Mexicans or Americans.

The Copper Mine Apaches occupy the country on both sides of the Rio Grande, and extend west to the country of the *Coyoteros* and *Pinalenos*, near the eastern San Francisco River. This may be called their proper home, though their incursions extend far into the States of Chihuahua and Sonora, where, during portions of the year, they reside. A favorite place of resort for them is near Lake Guzman, to the west of El Paso. They do not extend more than four or five days' journey north of the Gila. From the best information I can gain, their numbers have been greatly reduced within the last five years. Omitting those east of the Rio Grande, it is believed that they cannot muster two hundred warriors. My information is derived from General Condé, and from Mexicans who had long lived on the frontier, having frequent intercourse with them at Janos, and who knew all their chiefs. American authority places their numbers much higher, estimating them by thousands, instead of hundreds. But notwithstanding their depredations, they have from time to time been at peace with the Mexicans, receiving from the military authorities at Janos monthly supplies of corn and other articles of food. Hence the latter have had a better opportunity to judge of their numbers than we have.

Between the Sacramento Mountains and the Pecos are other Apache tribes more numerous than those in question, from whom they are separated by an uninhabited desert region between eighty and one hundred miles in width, extending from the Sacramento Mountains to the Rio Grande. The country which they occupy is believed to be one of the richest portions of New Mexico. It has not yet been explored; but I have been told by Mexicans who have crossed it at various places, that it has an excellent soil, is well watered and timbered. They keep up a show of friendship with the settlements by sending their old women to trade and beg; but the warriors rarely show themselves. It is not my intention to dwell largely on the Indian tribes in the present work, but merely to speak of them as we met them, to point out their localities, and to relate such occurrences as took place between us. There is much to be said relative to them all, which the limits of this work will not admit of, nor does it seem proper in a "personal narrative" of incidents, to enter into the broad field of ethnological investigation which presents itself west of the

Rocky Mountains. My materials in this department are copious, and will constitute the subject of a future memoir.

The Apache nation as a whole is one of the most widely disseminated on the North American Continent, and embraces a great many tribes which are as yet only known to us by name. Nor are we even able to say with certainty whether all the tribes said to be of the Apache stock belong to it or not. It is only by a comparison of their languages that their ethnological position can be accurately determined, In general terms, they may be said to extend from the Pecos on the east to the desert bordering on the Gulf of California (the limit of which is the valley of the Santa Cruz, south of the Gila), and to the Colorado, north of that river; or from the 103d degree of longitude west from Greenwich to the 114th. From north to south they extend from the country of the Utahs (Yutas), in latitude 38° north to about the 30th parallel. Beyond this they have no fixed habitations, though they range about two degrees further south in their predatory incursions in the States of Chihuahua and Sonora. On the Colorado River of California are many tribes only known by name; but whether they are allied to the Apache nation or to some of the California families is not known. The great *Navajo* (pronounced Navaho) tribe, the most populous of any west of the Rocky Mountains, in the district named, belongs to the Apache family; and I have no doubt that when an examination is made of the languages and other means of comparison, tribes still further to the north will be found to belong to the same stock. In fact, from analogies already selected, such has been found to be the case.*

The Apaches with which we had intercourse must rank below the Indian tribes east of the Rocky Mountains, dwelling on the tributaries of the Mississippi and Missouri Rivers. They are without that dignified bearing, and those noble traits of character, which characterize the latter; and as they perform no labor,

Group of Apaches.

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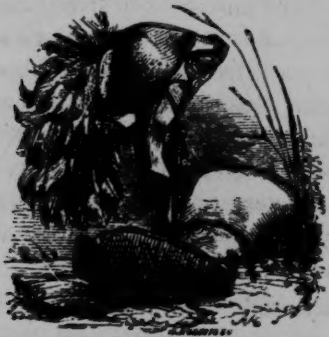
* In an essay read before the American Ethnological Society by my friend, Professor Wm. W. Turner, he has shown that a close analogy exists between the languages of the Apaches and the Athapascans, a tribe on the confines of the Polar Sea.

not even that of hunting, their physical developments are greatly inferior. Mangus Colorado, and a few other prominent chiefs, who live pretty well, and have the lion's share of their plunder, are rather good looking; and a finer set of children than those of Mangus, of Dalgadito, and Poncé, are not often seen. But beyond these few exceptions, the Apaches are an ill-formed, emaciated, and miserable looking race. As those we saw did not cultivate the earth, they depend upon what they can steal from the Mexicans and Americans on the frontier for a subsistence. The supply thus obtained consists almost exclusively of mules; and when this fails they resort to the bulb of the maguay. In fact, this may be said to constitute at all times the food of the majority; for the chiefs take good care that *they* at least shall have mule meat when there is any.

In saying that certain individuals were fine looking, I speak of mere physical development. I do not think I ever saw a mild or amiable face among them; on the contrary, they had all a treacherous, fiendish look, which well expressed their true character. They are in general poorly clothed, a majority wearing deer skins tied about them, without any attempt to fashion them into garments. If a man could get a shirt, he seemed quite content without any other garment. Many, and I should think most of them, wore long deer-skin boots, with stout soles, turned up at the toes, the legs being either fastened around the loins or turned over at the knees. These were well made, and exhibited more taste and care than any other garment about them. It is not, however, on account of their beauty that they wear these fine long boots, but from necessity; as they require them to protect their legs when riding among the thorny chapporal of the plains, as well as from the venomous reptiles which abound there. The Apaches have their dandies as well as their civilized brethren; in fact I have found among every tribe of Indians men of this class, whose minds seem to dwell more on their personal appearance than on any thing else. They are fond of remaining at home, associate more than others with the women, and never accompany war parties. They are looked upon as drones by the braves. Those whom we saw among the Apaches, were generally dressed in some tawdry manner, and their faces covered with paint. Some, with a truer sense of savage beauty, and who have fine manly forms, wore nothing but a breech cloth and boots. These, mounted on fine animals, and armed with a lance or bow, sometimes made their appearance among the ragged and motley groups which visited our camps. A helmet-shaped cap of deer skin, fitting close to the head, and covered on the top with a bunch of feathers, is worn by many; while others have straw hats, taken from the heads of Mexicans whom they have killed. Another and very picturesque ornament which the hatless and capless have recourse to, is a wreath of grass or leaves, twined around their heads and projecting well over their eyes, to protect them from the sun. The Mexican *serape* is also worn by those who have become the possessors of such a useful article of dress by murdering its former owner. The women wear jackets or tunics of deer skin, more or less ornamented, a profusion of beads, when they can get them, and deer-skin leggins. Most of them wear unbleached cotton or calico shirts, which they obtain of the Indian traders or at the settlements.



Apache Head-dress and Boots.

On one occasion our camp was visited by a band of Navajo Indians, four hundred of whom were encamped on the banks of the Gila. This is a formidable, warlike, and treacherous tribe, which descend from their strongholds in the cañons west of Santa Fé, and rob the inhabitants of New Mexico of their cattle and sheep. They had heard of our party, and had taken advantage of the friendly manner in which the Apaches came to us, to accompany them. With the exception of a different style in their boots, and in the manner of arranging their hair, their dress appeared the same. Their bows, arrows, and lances were the same, and the helmet-shaped head-dress did not materially differ. The Navajos had a very fine description of woollen blanket of their own manufacture, which they use to cover their bodies when it is cold, as well as for saddle cloths. These blankets are superior to any native fabric I have ever seen; in fact, they are quite equal to the best English blankets, except that they are without any nap. I have been told that they spin and dye the wool, which they raise themselves; though others assert that the richer colors are obtained by unravelling fine scarlet blankets of English manufacture, the threads of which are then used in the weaving of their own. Whether this is true or not I am unable to state. At any rate, even if true, this forms but a very small portion of the fabric, the remainder of which is undoubtedly spun and woven by themselves.

We had some little bartering with these people, giving them shirts and other articles of wearing apparel for their bows and arrows, and caps, and some of our party were so fortunate as to obtain some fine specimens of their blankets. I got a small one of inferior quality, but sufficient to show the style of their manufacture.

Many believed that the Navajos who visited us on the occasion referred to, were but spies to learn our numbers, and see whether any thing could be gained by attacking us; a belief in which I participated, and which subsequent events strengthened. We never saw them after.

July 5th. One of the cooks disappeared last night, taking with him a fine horse, one of Colt's large revolvers, and sundry articles of clothing. He was pursued by Mr. White and another, who overtook him on the plains two days after, recovered the horse and pistol, and left him to find his way to the settlements as he could.

On the 6th July, another incident of a more serious nature occurred, which bade fair to break up the friendly intercourse with our Indian friends, and bring us to open warfare. About one o'clock word was brought to me, that an Indian had been shot by Jesus Lopez, the Mexican teamster to whom I have before alluded. I at once ran to my door, and saw the greatest consternation in the place. The Indians, of which there were many about us at the time, were screaming and running in all directions, as though fearful of a general rising and massacre of their people. Our own party too were in great alarm, and every man ran for his arms, not knowing but that the Indians, who had so often been treacherously dealt with by the whites, might at once attack us, to be revenged for the loss of their companion. Mangus Colorado, Delgadito and Coletto Amarillo,* who were in our camp, seized their arms, and, mounting animals, retreated to a small hill a few hundred yards from the fort, where they stopped to see what was to follow, and make their escape in case of necessity. Many of their people crowded around them for protection and guidance. Some remained many minutes beckoning to them to come back; and assuring them that they would not be hurt. They remained quiet until Colonel Craig, with the courage and resolution which he exhibited in every trying scene, advanced alone towards them, told them he and all of us were still their friends, and

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*These it will be perceived are all Spanish names: Mangus Colorado, meaning *Red Sleeve;* Delgadito, *slender;* and Coletto Amarillo, *yellowtail.*

invited them to the garrison where the man who had shot one of their people should be brought before them. They at once came forward; and while we all stood on the parade ground in front of the garrison, the prisoner was brought up with his feet in chains, by a file of soldiers. We then passed in to the quarters of Colonel Craig, for an examination of the case. On questioning the prisoner why he had shot the Indian, he made no reply, except to say on returning from the Mimbres, some Indians whom he met had threatened to kill him; although he did not pretend to say that the man he had shot was the one.

It appeared on examination, that Gordon, a cook, was the only person who witnessed the affair. He states that there was some dispute between Jesus and the Indian, about a whip belonging to the latter, and which the former wished to buy. Jesus had the whip under his arm, and on failing to agree about it, the Indian attempted to pull it from him. The Mexican, becoming enraged, first picked up a stone, and then seized his rifle. He levelled it at the Indian, when scarcely beyond the reach of the muzzle, and deliberately shot him down, the ball passing through his body just above the heart. Jesus ran to the Indian's horse which stood near the tent, intending to make his escape. Mr. J. B. Stewart, who was not far off, and heard the report levelled his rifle, threatening to shoot him if he stirred. The fellow stopped, and the next moment was a prisoner. When these facts were made known to Mangus Colorado, and the other chiefs present they were satisfied that the Americans were in no way implicated in the affair, and that it was a private quarrel between a Mexican and an Indian. They were equally satisfied when assured that the prisoner should be kept in chains, and punished if the man died; and the conference ended in good feeling. The chief, *Ponce*, made a long speech on the occasion, and said they "all believed it the work of one bad man, and that the Commission had nothing to do with it." "If the man died, they should require the punishment of the murderer. If he lived, the Mexican should be compelled to labor, and the proceeds of it be given to the family of the wounded man, as a remuneration for the loss of his services."

The wounded man was taken to the hospital where he was attended by the surgeons of the Commission and the escort, and the best possible care taken of him. His wife and mother were in constant attendance, and his friends had access to him at all times. The chiefs were in daily, and expressed their satisfaction with my course. The poor man lingered for a month when he died. I ordered a coffin made for him, and intended having him decently buried; but his friends, refusing both the coffin and burial, laid him across a mule and carried him to their camp for interment, according to their own customs.

The Indians now waited upon us in considerable numbers, accompanied by their chiefs, and demanded that the prisoner should at once be delivered into their hands. I told them that as the offence was committed in our territory, the man must be punished according to our laws. Most of the chiefs were assembled on this occasion, and presented a strange and picturesque appearance, as they were distributed about my quarters in various attitudes. Some standing, others sitting on benches, while the larger number adopted the common Indian position of sitting on their haunches with their knees drawn up before them, clasped by their hands. Had there been room to lie down, that posture would have been preferred. They came professedly as advocates of the woman's cause, and would listen to nothing but the unconditional delivery of the murderer, preferring their demand with considerable eloquence. Three or four would start upon the same point together, and he who could talk the fastest would be allowed to go on with the subject. As in the former controversy with these people, the arguments between the chiefs and myself were taken down. I began by addressing them through Mr. John C. Cremony, the interpreter of the Commission, as follows:

"I feel sad, as well as all the Americans here, and sympathize with our Apache brothers for the death of one of their braves. We were all friends. The dead man was our friend, and we regret his loss. I know that he had committed no offence; that he even did not provoke the attack upon him. But our Apache brethren must remember that it was not by the hand of an American that his death was caused. It was by a Mexican, though a man in the employ of the Commission. For this reason it is my duty to see justice done you, and the murderer punished.

"I am here, as I have told you, in command of the party engaged in making the dividing line between the United States, the country of the Americans, and Mexico. I have explained this to you fully before, which you now understand. Beyond this I have no powers. The great chief of the American people lives far, very far, towards the rising sun. From him I received my orders, and those orders I must obey. I cannot interfere in punishing any man, whether an Indian, a Mexican, or an American. There is another great chief who lives at Santa Fé. He is the governor of all New Mexico. This great chief administers the laws of the Americans. He holds a court wherein all persons charged with crimes are judged. He alone can inflict punishment when a man has been found guilty. To this great chief, this governor, I will send the murderer of our Apache brother. He will try him, and, if found guilty, will have him punished according to American laws. Such is all that I can do. Such is the disposition I will make of this man. It is all that I have a right to do."

Ponce. "This is all very good. The Apaches know that the Americans are their friends. The Apaches believe what the Americans say is true. They know that the Americans do not speak with two tongues. They know that you have never told them a lie. They know that you will do what you say. But the Apaches will not be satisfied to know that the murderer is punished in Santa Fé. They want him punished here, at the Copper Mines, where the band of the dead brave may see him put to death—where all the Apaches may see him put to death (making the sign of being suspended by the neck). Then the Apaches will see and know that their American brothers will do justice to them."

Commissioner.—"I will propose another plan to the chiefs and captains of the Apaches. This plan is to keep the murderer in chains, as you now see him; to make him work, and to give all he earns to the wife and family of your dead brave. This I will see paid in blankets, in cotton, in beads, in corn, in money, or in any thing the family may want. I will give them all that is now due to this man, and at the end of every month, I will give them twenty dollars more in money, or in goods. When the cold season arrives, these women and children will then come in and receive their blankets and cloth to keep them warm, and corn to satisfy their hunger."

Ponce.—"You speak well. Your promises are fair. But money will not satisfy an Apache for the murder of a brave! No! thousands will not drown the grief of this poor woman for the loss of her son. Would money satisfy an American for the murder of his people? Would money pay you, Señor Commissioner, for the loss of your child? No! money will not bury your grief. It will not bury ours. The mother of this brave demands the life of the murderer. Nothing else will satisfy her. She wants no money. She wants no goods. She wants no corn. Would money satisfy me, *Ponce* (at the same time striking his breast), for the death of my son? No! I would demand the blood of the murderer. Then I would be satisfied. Then would I be willing to die myself. I would not wish to live and bear the grief which the loss of my son would cause me."*

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* This son of Ponce was the finest looking man we saw at the Copper Mines, and the greatest rascal. In an attempt some months

Commissioner.—"Your words are good and true. You speak with a heart full of feeling. I feel as you do. All the Americans feel as you do. Our hearts are sad at your loss. We mourn with this poor woman. We will do all that we can to assist her and her family. I know that neither money nor goods will pay for their loss. I do not want the Apache chiefs, my brothers, so to consider it. What I propose is for the good of this family. My wish is to make them comfortable. I desire to give them the aid of which they are deprived by the loss of their protector. If the prisoner's life is taken, your desire for revenge is satisfied. Law and justice are satisfied. But this poor woman and her family get nothing. They remain poor. They have no one to labor for them. Will it not be better to provide for their wants?"

The chiefs now exchanged views with each other, all having more or less to say; when Ponce, their principal speaker, said they had all agreed to leave the matter entirely with the mother of the deceased, and that by her decision they would abide. She evidently desired the life of the prisoner. Her desire for revenge or justice, was more to her than money or goods. The discussion was resumed.

Ponce.—"If an Apache should take the life of an American, would you not make war on us and take many Apache lives?"

Commissioner.—"No; I would demand the arrest of the murderer, and would be satisfied to have him

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later to run off some mules, he received a rifle ball in his thigh, which or a while checked his thievish propensities.

punished, as the Apaches punish those who commit murder. Did not a band of Apaches attack a small party of Americans, my countrymen, very lately on the Janos road? Did they not kill one of them, and pierce three others with their arrows? And did they not take from them all their property? Yes; you all know it to be true, and I know it to be true. I passed near the spot where it took place, three days after. The Apaches did not even bury their victim; they left him lying by the road-side, food for the wolves and crows. Why do not the Americans revenge themselves on you for this act? They are strong enough to do it. They have many soldiers, and in a few days can bring a thousand more here. But there would be no justice in that. The Americans believe this murder was committed by your bad men; by cowards. The Apaches have bad men among them; but you who are now with us are our friends, and we will not demand redress of you. Yet, as I told you before, you must endeavor to find the men who killed our brother, and punish them. Our animals feed in your valleys; some of your bad men might steal them, as they have already done; but the Americans would not make war on you for this. We hold you responsible, and shall call on you to find them and bring them back, as you have done. While the Apaches continue to do this, the Americans will be their friends and brothers. But if the Apaches take their property and you do not restore it, you can no longer be the friends of the Americans. War will then follow; thousands of soldiers will take possession of your best lands, your grass valleys, and your watering-places. They will destroy every Apache they find, and take your women and children captives."

The discussion continued in this manner for two hours, the chiefs showing much sagacity in arguing their point. The matter was finally settled very much to my satisfaction, and apparently to that of the Indians, by my paying to the mother of the deceased thirty dollars in money, that being the amount due the prisoner. I furthermore agreed to pay her twenty dollars a month, hereafter, the amount of the prisoner's wages. Thus was terminated this unfortunate affair, which, at one time, seemed about to destroy the good understanding which had existed between the members of the Commission and our Indian friends.

CHAPTER XV.

INCIDENTS AT THE COPPER MINES.

Arrival of Mr. A. B. Gray—Meeting of Joint Commission—Objections of Mr. Gray to initial point—Mules missing—Arrival of Colonel Graham —Mules stolen from Fronteras—Descent of the Apaches on the Mule herd—Organization of parties for the Survey—Application to Colonel Sumner for more troops—Hostile attitude of the Indians—Second incursion of the Indians—Mules taken—Colonel Craig goes in pursuit—Arrival of Captain Buford with dragoons to our aid—Indians pursued by Colonel Craig and Captain Buford—Third incursion of the Indians —Volunteer party go in pursuit—Indians overtaken and cattle recovered—Apache chief recognized among the robbers—Determine to set out for the Gila.

On the 19th July, Mr. A. B. Gray, United States Surveyor, Mr. Charles Radziminski, his principal assistant, and Lieutenant Burnside, U. S. Army, Quarter-master and Commissary, arrived. These gentlemen had come in the same party with Colonel Graham, whom they left at El Paso, and I felt greatly disappointed at the non-arrival of that officer, for whom more than two thirds of the Commission had so long been waiting to enter upon their duties. General Condé, the Mexican Commissioner, with some of his party, arrived at the same time, in order to make arrangements for going on with the Gila Survey, which had been so long delayed.

Mr. Gray presented his instructions from the Secretary of the Interior, and made known his readiness to go on with his work. I therefore instructed him to organize a party for the linear Survey of the Gila, and to make the necessary arrangements for wagons, mules, horses, camp-equipage, subsistence, etc., which would be furnished him by the Quarter-master and Commissary, of the Commission. He lost no time in complying with my instructions, but at once selected his assistants, and prepared to take the field.

The day after the arrival of Mr. Surveyor Gray and General Condé, a meeting of the Joint Commission took place, when arrangements were entered into to commence the survey of the Gila, the General and his assistants, on the part of the Mexican Commission, undertaking the astronomical portion, while Mr. Gray, with his corps of engineers and surveyors, was to make the linear survey. We now only required the arrival of Colonel Graham to organize an astronomical force on the part of the United States.

On the 25th of July, Mr. Gray addressed me a letter objecting to the Initial Point agreed upon by the Joint Commission, at 32° 22′ north latitude on the Rio Grande, which had been established and marked on the 24th of April preceding, and from which the line had been extended west by Lieutenant Whipple. He advised a suspension of the work.

I replied to Mr. Gray, that on a further examination I was satisfied that the Initial Point on the Rio Grande had been established according to the treaty, and that I should adhere to the agreement entered into relating to it. I soon after, on the 8th of August, advised the Secretary of the Interior of Mr. Gray's objections.

On the receipt of my letter and the objections of Mr. Gray to the proceedings of the Joint Commission and the Initial Point as established at 32° 22′, the Secretary of the Interior, the Hon. Alex. H. H. Stuart, requested Mr. Gray "to remove the only obstacle which now exists to the completion of this branch of the work, by affixing his signature to the requisite papers." As this and other official documents are important for a clear understanding of this question, and as they are inaccessible to the large mass of readers, I have thought it best to append them at this place in the form of notes, without entering into any argument on the subject. The official acts establishing the Initial Point have been before given, and would be incomplete without the following letters, all of which have been printed in the documents of the United States Senate."

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* Mr. Gray's letter of July 25th, 1851, containing his objections to the Initial Point may be found in Senate Document No. 119, 32d Congress, 1st Session, p. 279. My letter to Mr. Secretary Stuart, relating to the Initial Point, is contained in the same document, p. 145.

Secretary Stuart to Surveyor Gray.

DEPARTMENT OF THE INTERIOR,
October 31, 1851.

SIR: In relation to the temporary suspension of the work connected with the Mexican Boundary Survey, growing out of your refusal to affix your signature to the necessary papers establishing the Initial Point for the demarkation of the line at 32° 22′, you are informed, that inasmuch as the Commissioners appointed by their respective governments to run and mark the boundary line between the United States and Mexico were not necessarily constrained to suspend all operations connected with the Survey during your absence, and until your recovery from the

On the 28th July, several mules belonging to Colonel Craig, disappeared and could not be found; and as he believed the Apaches had been instrumental in driving them off, he determined to go in search of

indisposition with which you were afflicted, those officers progressed with the work intrusted to them, and fixed the Initial Point of said line on the meridian of latitude referred to.

As the Commissioners coincide in opinion respecting the correctness of their operations and their results, and are satisfied that the Initial Point has been accurately ascertained and determined, it is very desirable that the official documents necessary to the settlement of this important point should be at once perfected; you are requested, therefore, to remove the only obstacle which now exists to the completion of this branch of the work, by affixing your signature to the requisite papers.

I am, &c.,

ALEX. H. H. STUART,
Secretary.

A. B. Gray, Esq.,
U. S. Surveyor, &c.

Secretary Stuart to Major Emory.

Department of the Interior,
November 4, 1851.

Sir: I transmit herewith your commission as Surveyor, under the 5th article of the Treaty of Guadalupe Hidalgo, to run and mark the boundary line between the United States and Mexico, also a copy of a letter this day addressed to John R. Bartlett, Esq., United States Commissioner, containing explanations respecting your position and duties.

I also inclose a copy of my letter of the 31st ultimo, to A. B. Gray, Esq., late Surveyor; and in the event of his persisting in his refusal to affix his signature to the necessary papers for the establishment of the Initial Point for the demarkation of the boundary line as ascertained and agreed upon by the Commissioners of the two Governments, I have them at once. On the morning of the 29th, he set off with thirty soldiers for the Apache Camp, on the Mimbres. On the appearance of a military force among them, the Indians became much alarmed, and assured

to request you will sign the official documents which have been prepared for the purpose, and which only require the signature of the Surveyor to settle this important point.

I am, &c.,

ALEX. H. H. STUART,
Secretary.

BREVET MAJOR WM. H. EMORY,
United States Surveyor, &c.

Mr. Gray having been removed before he had an opportunity to affix his signature to the boundary document as directed; Major Emory obeyed the instructions of the Secretary of the Interior, as appears by his letter to that officer, which may be found in Senate Doc. No. 6, Special Session, 1853.

Extract from Major Emory's Letter.

CAMP NEAR FORT DUNCAN,
October 1, 1852.

* * * On my reaching the ground to take charge of the Survey, November, 1851, I found that Mr. BARTLETT and the assistant Surveyor had agreed upon the Initial Point, 32° 22′, and that a great stone monument had been erected, marking the point, and having the usual inscriptions, and the names of the American and Mexican Commissioners, Astronomers, and Surveyors.

The Surveyor (Mr. GRAY) came out long after the Initial Point was agreed upon, and the monument erected and the line begun, relieving the acting Surveyor (Lieutenant Whipple), and protested against the point. With the protest and the views of the Commission before him, both sides, it is presumed fairly stated, the Hon. Secretary instructed the Surveyor to sign the maps; but before the instructions reached him he was relieved, and I was appointed in his place, with the same instructions.

I therefore considered the matter as settled, and the action of the

the Colonel they had not been instrumental in stealing his mules, nor did they know any thing about them. Upon their promise to go in search of them, and if found to bring them in, Colonel Craig returned to the fort.

Government as final. The official documents which have been prepared for the purpose, referred to in my letter of appointment and instructions, never having been presented, no action has been taken in the matter definitely and finally to "settle this important point." I quote from my instructions, for as I shall presently show, it has, by the views taken of the subject by both sides, ceased to be an important point.

But I have done this in compliance with the letter and spirit of my instructions. Mr. Salazar, the Mexican Commissioner and Surveyor, met me at the Presidio del Norte, August 1st, to sign the maps of the Rio Grand—forming the boundary. Neither party had the maps properly prepared, nor was Mr. Salazar at all prepared in money or means to go on with the work at the rate I was progressing. I had already signed, conjointly with him, as astronomer and surveyor, the only maps fit for signature; but he remained pressing me to sign other maps which involve incidentally the Initial Point agreed upon by Mr. Bartlett, Mr. Condé, Mr. Salazar, and Mr. Whipple, from which Col. Graham had started his survey of the river. *I therefore, on the 28th of August, signed the maps according to my instructions*, with the reservation contained in the paper, a copy of which is herewith sent, marked A., signed conjointly by Mr. Salazar and myself, and the statement therein referred to, setting forth on the face of the maps that it was the "*boundary*" *agreed upon by the two Commissioners, April* 20, 1851."

I presume it was never intended I should give my certificate, as Astronomer and Surveyor, to the correctness of the determination of a point which had been determined by the observation of others, and without consultation or advice of mine. On the other hand, I do not for a moment doubt the power of the Government to instruct me on the subject, or hesitate as to my duty to obey its mandates, which I understand as requiring me only to authenticate the Initial Point agreed upon by the Commissioners of the two Governments.

In reference to the importance of the point, I think it as well to

On the 2d August, Colonel Graham, Principal Astronomer, Lieutenants Whipple and Smith, and several other gentlemen arrived, and encamped near the fort.

On the 7th August, word was brought me that eight or ten of our mules which were kept at the Astronomical Observatory at Frontera, near El Paso, had been stolen by the Indians; and the following day Lieutenant Green set off with a file of soldiers for Socorro, in order to intercept the robbers.

Four days after this, our camps were aroused with the news that the Indians had made a descent upon the mules belonging to Colonel Craig's command, which were grazing, in charge of three or four men, about a mile from the fort, and had run off about twenty-five together with some valuable horses. As soon as a party could be got ready they set off in pursuit, but after a few hours returned unsuccessful. One of the men who

state that the line agreed upon by the Commissioners, April, 1851, is about thirty-three minutes north of the line contended for as that laid down on DISTURNELL's map, but reached about sixteen minutes of an arc further west; and as both lines run three degrees of longitude west, the difference of territory is three degrees of longitude, multiplied by thirty-three minutes of latitude, minus sixteen minutes of longitude, multiplied by about forty minutes of latitude, each having a middle latitude that may for the purpose of computation be assumed at thirty-two degrees. Neither line gives us the road to California, and the country embraced in the area of difference, with the exception of a strip along the Rio Grande about nine miles long and from one to two wide, is barren, and will not produce wheat, corn, grapes, trees, or any thing useful as food for man or for clothing.

Neither line will give a channel of communication for posts along the frontier, without which it is impracticable to comply with the eleventh article of the treaty, which engages the United States to keep the Indians out of Mexico.

was left with the mules was missing; but whether he was killed or taken away prisoner, is not known. He was never seen or heard of after.

The manner in which the theft was accomplished, was thus related to me by one of the herders: The animals were grazing in a little valley, surrounded by low pine trees and scrub oaks, when on a sudden a party of Indians who had approached unperceived among the trees, which were here very thick, rushed among the herd, set up a whoop that frightened the timid mules, and drove them off. The Indians were all mounted; and before the herdsmen could gain their saddles, they had the mules and horses on the full run before them. The herdsmen had no resource but to collect such animals as were left, and hastened with them to our camp.

On the arrival of Colonel Graham, as mentioned above, arrangements were entered into as soon as possible for going on with the work which had been so long delayed in consequence of his absence, and that of Mr. Gray. One astronomical and two surveying parties were organized for the survey of the Rio Grande, all of which were to be under the direction of Colonel Graham. The work was to be commenced at the Initial Point, and carried to the mouth of that river. The astronomical party for the survey of the Gila was placed in charge of Lieutenant A. W. Whipple; while that for the linear survey remained under the principal Surveyor, A. B. Gray, Esq.* With this organization we hastened to get our wagons, mules, tents, camp equipage, provisions, etc., ready in order to take the field as soon as possible.

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* Although I have embraced in this narrative the particulars relating to the establishment of the Initial Point, I do not think it proper to

While these arrangements were in progress, I sent a messenger to Santa Fé, with a letter to Colonel Sumner, commanding the troops in that military division, with a request that another company might be furnished me for an additional escort. This, on consultation with the army officers, was deemed actually necessary. Our present escort had been greatly reduced by desertions and sickness, so that there were less than forty effective men. We were now about to

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enter into the particulars of the serious difficulties which took place between the Principal Astronomer, Colonel Graham, and myself, immediately on his arrival, growing out of his extraordinary and inexcusable delay of more than nine months from his appointment, in reaching the field of operations, and of his assumption afterwards. Never, in the whole course of my life, have I been placed in so trying a position. But such were my instructions, and such my responsibilities as head of the Commission, that I must either maintain this position, or, in succumbing to the demands of Colonel Graham, make myself and the Chief Surveyor, Mr. Gray, subordinate to him, resign all power and control on the members of the Commission, and become a mere nullity. I preferred the former alternative; and in order to lay the matter before the Government, and abide its approval or disapproval, I sent Mr. Charles Radziminski, the Principal Assistant Engineer, to Washington with my dispatches. These unfortunate difficulties with Colonel Graham, most of which was owing to contention for rank and position between Mr. Gray and himself, greatly retarded the progress of the Survey, and caused much suffering to the parties engaged on the Gila portion of the work. The Government sustained me in my position, and removed Colonel Graham, appointing Major W. H. Emory in his place. The Correspondence on this subject may be found in Senate Document No. 119, 32d Congress, 1st Session—and particularly in my Dispatch to the Hon. Secretary of the Interior, No. 21, page 433 of the same document.

enter a field in the midst of hostile Indians, where we should be divided necessarily, into several small parties, thereby subjecting ourselves to the danger of losing our animals as well as of being attacked unawares. Before leaving Washington, the Secretary of War directed the Commanding Officer at El Paso, to detail an additional company for the escort, in case the Indians "have assumed a more hostile attitude towards the Americans, in the region through which the lines of the Survey are to be made." I now believed that such an exigency had occurred; for more robberies had been committed on the frontier than for some time previous, and the Commission, as well as its escort had met with losses within a few days, which showed that either the Apaches or some other tribes entertained inimical designs towards us. But my request was not complied with.

Since the visit of Colonel Craig to their camp in search of his mules, the Indians had been more reserved, and for a week previous to the 17th August, none had visited us. On the afternoon of that day a man who had been herding the mules and cattle about six miles from the Copper Mines, suddenly rode in with the news, that a descent had just been made upon them by a band of Indians, and that about fifty of the best mules had been driven off. Our men fortunately secured between seventy and eighty, by driving them into a corral or inclosure as soon as they discovered the enemy. But the rest were past recovery; for had the men attempted to pursue them, they would have been overpowered, and have lost the remainder of the stock.

As may be supposed, this news produced a great excitement in our camp. Immediate preparations were made to pursue the robbers, and Colonel Craig with his usual promptness set off at midnight, with between twenty and thirty men, which were all that we could mount. Unfortunately we possessed few good horses, and there was no alternative but to mount the soldiers on mules. My only hope was that the Indians would not go far, finding they were not at once pursued, which would enable Colonel Craig to overtake them, or surprise them in the camp. He soon struck the trail of the robbers, to which he was guided by Tucker, one of the herders who had followed them for several miles. About thirty miles beyond the Gila, the Colonel surprised two camps; but discovering his approach, the Indians made off, and, by scattering in every direction, as is usual in such cases, eluded further pursuit. Their fires were still burning, with mule meat and corn half roasted about them. His men also found some blankets such as are made by the Navajos, which caused him to attribute the robbery to that tribe. The Navajos were known to be in force to the amount of about four hundred near the Gila, and I believed the Colonel's inference to be correct.

On the day this robbery took place, I sent a messenger to Major Shepard, commanding at Doña Ana, advising him of the depredation of the Indians, and soliciting such aid as it might be in his power to extend to us in the emergency. He promptly attended to my request, and on the 22d instant Captain Buford arrived with his company of forty Dragoons.

The following day Colonel Craig again set out with some eight or ten men, being all that he could mount, together with Captain Buford and his command. A few civilians joined the party as volunteers. All were well mounted and armed, and carried their provisions and camp equipage on pack mules. They took no tents, and as little baggage as possible.

The loss of so many animals at this particular juncture was a most serious additional impediment to the movements of the Commission. We had had no more than were absolutely necessary, and now some of the parties must necessarily be delayed until others could be procured. Nevertheless, I was determined to get off, if we had any means of going, and the necessary preparations for the journey proceeded. That General Condé might not be disappointed by my not meeting him at the Burro Mountains according to agreement, I despatched Mr. James Steele and Mr. Scott, assistants in the Surveying corps, to his camp to make known to him our losses by the Indians, which might delay us a few days beyond the time. But we had not yet got through our troubles.

On the morning of the 24th August, the alarming intelligence was brought us, that the Indians had entered the valley where the animals were grazing, about half a mile from the fort, and had run off all the mules and horses belonging to Colonel Craig, together with the eighteen mules used by Captain Buford, to transport his wagons from Doña Ana. Great consternation was caused by this news, particularly as it was followed by a report that the Indians were endeavoring to drive off our cattle, of which we had nearly a hundred head. We seized our arms, and ran to the hills near the cañon, where we discovered the cattle urged on by the herdsmen, and making through the trees and bushes for our camp, where we soon had the satisfaction of seeing them safely inclosed. An hour later we heard that a descent had also been made upon the horses and cattle belonging to Mr. Hay, who with a small party, was engaged in working the gold mines, four miles distant; and soon after the family of this gentleman, arrived with all their effects, corroborating what we had heard. They informed us that all Mr. Hay's cattle had been run off, and that he and his people had armed themselves and gone in pursuit. A volunteer party from the Commission soon joined them, embracing some fifteen or twenty persons, and among them Lieutenant Whipple. They pressed the Indians so hard that they overtook them just at dark, after a flight of thirty miles. As in the former instance, they abandoned the cattle, and scattered in all directions. The cattle of Mr. Hay, twenty-two in number, were recovered; and a horse and mule belonging to the Indians were also taken. The party with the mules having two hours the start, could not be overtaken.

Our place was now in a state of siege. The camps of the several surveying parties, which had been scattered through the valley, were brought into the neighborhood of the fort; picket guards were stationed upon the commanding eminences; arms were cleaned, and ammunition distributed; and every precaution taken to repel an attack; for it was thought that the Indians, who are ever on the alert, seeing so large a force leave the place, might suppose it defenceless, and make a descent upon those who remained.

There could be no doubt as to who the depredators were in this case, as Mr. Hay was present when his cattle were taken, and had a parley with the well-known chief, Delgadito, who stood at a distance beyond the reach of his rifle. These robberies were, therefore, committed by the very Indians who had been fed by us, and had received every kindness at our hands. We had the charity, however, to believe that they were set on by the Navajos, as it was predicted that the appearance of this tribe boded no good.

About one hundred and fifty animals had been stolen, a part of them almost within sight of the fort; showing, if it needed any demonstration, the utter uselessness and inefficiency of our infantry escort for such a service. Had my last application for a company of dragoons been complied with we should have saved these animals; as my messenger had returned from Santa Fé before any robberies had been committed, except that of the few mules lost by Colonel Craig in July.

In consequence of our last loss, Lieutenant Green informed me that it would be impossible to furnish the escort required for the protection of the Gila party, as he was deprived of all means to transport their provisions and camp equipage, even though the men should walk. After the return of Colonel Craig, who might be absent two weeks, it would be necessary for Lieutenant Green to go to the towns on the Rio Grande to purchase a new outfit of mules and horses. In this state of things, it was evident that if

I waited for the escort I must delay my departure at least a month, thereby deranging the plans of the Mexican Commission by failing to keep my engagement with them, and retarding our own work to so late a period that it might be impossible to complete the survey of the Gila before winter set in.

In the midst of all these difficulties, I determined to push forward with the work, and notified Mr. Gray and Lieutenant Whipple, the chiefs of the parties that were to accompany me, to be in readiness to leave on the 27th instant. Colonel Graham, whose parties had also been organized for the survey of the Rio Grande, and were then awaiting his orders to enter the field, informed me that he would accompany me to the camp of General Condé, in order "to pay his respects" to that officer, and to his friend Mr. Salazar.

At this time our supply of provisions at the Copper Mines was very limited; but as a train of wagons sent to our dépôt near El Paso for provisions was expected in three or four days, with an ample supply, I determined to start with only about ten days' rations of flour, sugar, coffee, pork, etc., leaving orders for the remainder to be sent forward immediately on its arrival. Of fresh meat we had an abundant supply, taking with us twenty-five head of beef cattle, and one hundred and eighty sheep.

CHAPTER XVI.

THE COPPER MINES TO RIO SAN PEDRO.

Organization of parties for the Survey of the Gila—Leave the Copper Mines—Pack-mules—Mode of Packing—Ojo de Vaca—Camp in the Burro Mountains—Ojo de Inez—Grizzly Bear—Violent rain—Heavy travelling—La Piloncillo, or Sugar-loaf Mountain—Broad plain—Camp at El Sauce—Man missing—Camp in the Chiricahui Mountains—Boggy road—Want of water—Dry lake—Reach the Mexican Camp—Meeting of the Joint Commission—Mr. Gray's objection to the Boundary—March resumed—Mules abandoned—Reach San Pedro River—Its character.

The journey we were now about to undertake was entirely different from any we had yet made. Since leaving the coast in Texas we had, except for eight days, followed a well marked and beaten road, practicable for wagons, and which was constantly followed by trains of emigrants passing to California. Now we had first to traverse a broad tract of country between us and the Gila, where there was no road, or even a trail; ignorant as to the existence of water or grass, or even whether it would be possible to reach our place of destination with the wagons. It was necessary to strike the Gila near the point where it is intersected by the western boundary of New Mexico, or in longitude 109° 47′ west from Greenwich. It was known that this river had its rise in lofty mountains, through which it ran for nearly two hundred miles of the portion to be surveyed; and hence our uncertainty as to the best mode to be adopted for conveying our equipage and supplies. As the Copper Mines are at an elevation of six thousand two hundred and fifty feet above the level of the sea, there must necessarily be great descents before reaching the lower plains. But the great advantage which wagons possess over every other means of transportation, where it is possible to get through with them, induced me to use them as far as possible, at the same time keeping well provided with pack-mules in case of emergency.

The parties for the survey of the Gila were organized as follows:

Andrew B. Gray, *U. S. Surveyor in charge of party for the Linear Survey.*

John Bull, J. H. Prioleau,	*1st Assistants.*
Malcolm Seaton, James Steel, James T. Scott, Wm. A. Taylor,	*2d Assistants.*

William Bausman, *Clerk and Assistant.*

Eight laborers and servants; two stonecutters; one blacksmith; one carpenter; two cooks; three arrieros, and one teamster.

Lieut. A. W. Whipple, *Topog. Engrs. in charge of the Astronomical and Topographical party.*

Henry C. Force, Frank Wheaton, Hugh Campbell, John O'Donoghue,	*Assistants.*

Three instrument carriers; five laborers and servants; two cooks; three arrieros and herders; one teamster. To drive the twenty-five head of cattle and one hundred and eighty sheep, three men were employed.

My immediate party consisted of the following:

THOMAS H. WEBB, *Secretary of the Joint Commission, Surgeon, and Mineralogist.*

JOHN C. CREMONY, *Interpreter.*

HENRY C. PRATT, *Draughtsman.*

GEORGE THURBER, *Quarter-master, Commissary, and Botanist.*

JOHN J. PRATT, *Assistant* (afterwards transferred to Lieutenant Whipple).

One cook; two laborers and servants; three arrieros.

The whole party, including myself, made fifty-seven persons, to which I must add the captive girl, Inez Gonzales, whom I meant to send to her family at Santa Cruz when we should be near that place. My original intention had been to take the larger portion of the military escort with me; and Colonel Craig had made his arrangements accordingly, and intended to accompany it himself, leaving Lieutenant Green with a small detachment for the parties on the Rio Grande, with the hope that additions would be made to it as soon as the recruits came out. But his plans, as well as my own, were frustrated by the depredations of the Indians. To have waited until Colonel Craig could make good his losses would have deferred the expedition for a month at least. I therefore thought it best to hasten on and fulfil my engagements with the Mexican Commission, and then proceed to the Gila and commence the survey. I requested Colonel Craig with his escort to accompany the train of provisions, which was to follow by the California road under the charge of Captain Barry, and to join the surveying parties at or near the Pimo Villages, on the Gila. This would enable him to send to the settlements and get his mules before our train would leave; and the surveying parties would merely be deprived of his protection until they should reach that point.

On the morning of the 27th of August, every thing was in commotion in our several camps, each party making their own arrangements for departing. A full day's march was not contemplated; to leave our camp and quarters, to get our wagons, mules, tents and camp equipage together, and get a start, was all that we expected to accomplish the first day.

We had not before used pack mules; so that this portion of our train and its preparation was a novelty to us.* The mules are first driven up, brought into a line, and tied. The packs for each are arranged, so that each may carry the same weight, and such articles are selected to accompany each other as will ride best together. Thus two trunks or panniers of equal weight are placed together for one animal—cooking utensils in hampers for another—tents, poles and bedding for a third—provisions according to their bulk and weight for others, and so on. These are arranged with much care, and the *arriero* or muleteer, endeavors to preserve the same load for each mule as long as he can.

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* Pack mules are not used in Texas, in the northern portions of Chihuahua, and but little in New Mexico, as the country can be every where traversed with wagons. The poor farmers, however, use them as well as jackasses to carry wood, and for transporting small loads.

This saves much time in packing, and avoids confusion. The *aparejo* or pack-saddle, is a heavy, clumsy affair, stuffed with hay so as to form a large pad on each side of the animal, to protect him from his heavy burden, and weighing from thirty to forty pounds. When all is ready, a blinder is slipped over the eyes of the mule, which renders him perfectly docile. The cumbrous saddle is then thrown over his back, and bound with lashings so firmly, that the body of the beast is brought into the shape of an hour-glass; after which the load is laid on and secured by a mysterious combination of cords which none but an *arriero* can comprehend. These are tightened by the united efforts of two men, who, with one foot against the saddle, pull away with their utmost strength. The groans and grunts of the animals as the cords tighten upon them, the jokes and shouts of the arrieros, and occasionally the antics of a beast that for a moment has regained its liberty, form a scene which is ever novel and amusing. Now and then, after every thing has been arranged, and a mule has been suffered to walk off with his load, he will lie down and roll, displacing his pack, and putting every thing in disorder. All has then to be taken off, and the process repeated *de novo.* The arrieros, who are all Mexicans, form a peculiar class, who differ as much from their countrymen, as sailors with us do from landsmen.

Soon after 12 o'clock I left the Copper Mines, in advance with my immediate party, intending to stop at some convenient watering place for the rest. We were all mounted, including the captive girl, who was placed on a very gentle mule. All the baggage, camp equipage, and a portion of our subsistence was carried on the mules. I also had with me a Mexican lancer, whom General Condé had sent to direct us to his camp and to the watering places on the route. When about six miles out I received word from Mr. Gray that, owing to the heavy load in his wagon, he should be unable to go as far as we had intended, and wished me to encamp soon; besides which, one of his teamsters had refused to proceed. As it was impossible to send him a man, I ordered that the prisoner Jesus should be set at liberty, and should join Mr. Gray. I felt no longer bound to keep this man in chains and at work, for the benefit of the Indians, who by their robberies had forfeited all claim on me. Nor could I send him to Santa Fé for trial. He had behaved himself well ever since; and as our post at the Copper Mines would soon be broken up, I thought it best to take him with us.

Being near a spot where there was water and grass, we made our first encampment. Lieutenant. Whipple and Mr. Gray, with their parties, joined us in the evening. One of Lieutenant W.'s pack mules had started off from the train during the march and disappeared among the hills. Parties were sent in search but he could not be found. His pack contained the clothing of some of the party, and was a serious loss to them. We had much trouble with our own mules, which kept constantly breaking away; but they were all finally brought in and secured.

August 28th. After much time spent in refitting the packs to our mules, which were not yet fairly broken in, we again set out. We were now all together, including Colonel Graham's party, which added considerably to our number. This officer had two wagons and an ambulance, several assistants, a corps of laborers, servants, cooks, and a military escort. The train now stretched out for a long distance, as the pack mules followed each other in a single file. The officers and men generally rode side by side; and as the whole party embraced upwards of seventy persons, our cavalcade made quite a respectable appearance. We stopped for an hour at *Pacheteju* to water our animals, and then pushed on to *Ojo de Vaca*, where we encamped. The plains to-day presented a very different appearance from what they did when we crossed them in May and June before the rains. They were now covered with a rich coat of verdure, and resembled the green hills and grassy plains of the North.

August 29th. From this place four roads diverge. To the north is the road to the Copper Mines, we had just traversed; eastward is the one taken by emigrants from New Mexico, and first opened to this place by Colonel Cooke, which continues south-westwardly to the Guadalupe Pass; and southward runs the road to Janos. Our course lay westward near the boundary line to a mountain range about fifty miles distant, where General Condé was encamped with the Mexican Commission awaiting my arrival. Leaving Ojo de Vaca, we struck across the open plain due west, to pass a spur of the Burro Mountains. Twelve miles brought us to this mountain, when the Mexican lancer said that by turning up a cañon or defile to the northward, we should find an excellent spring of water, and that none would be met with again for about forty miles. We accordingly left the trail and followed him. In a short time we entered a narrow and picturesque defile thickly wooded with scrub-oaks. This we followed for about five miles, when it opened upon a beautiful grassy meadow about three hundred yards wide, in which were many fine springs. Here we encamped, near the base of the hills, and about three miles north of the line where the Mexican Astronomers had had their observing camp. After dinner I followed the valley up for a mile. The flat meadow-like appearance continued as far as I could trace it from the tops of the hills, hemmed in on both sides by mountains. This valley I am inclined to think extends to the Gila, and during heavy rains is covered with water. There is land enough here to support a few families, with excellent water and some wood; and it would be a good point for a station, in case a wagon road or railway should be constructed across this country.

The weather to-day was extremely warm, so that our captive girl has suffered much from the exposure to the sun. Named this spring *Ojo de Inez*, or Inez's Spring, after her. I believe it is known to the Mexicans as *Ojo de Gavilan* or Hawk Spring.

In the hope that we might be able to find a passage across the mountains, without retracing our steps through the defile by which we had entered, and thereby save some six or seven miles of a very bad road, I sent a small party out to search for a practicable route. Towards evening they returned and reported that they had found one.

August 30*th*. The defile through which we were to pass, was about half a mile south of our camp. I rode in advance accompanied by several to reconnoitre, and followed by the pack mules. This enabled us to select the best route for the wagons, which brought up the rear. The course was very tortuous, but without a hill that required us to lock our wagon wheels.

As we emerged from the mountains I rode up to the top of a hill with two gentlemen, in order to obtain a better view of the country. While seated on a rock enjoying the prospect before us, we were startled by the appearance of a huge grizzly bear, about fifteen rods distant, advancing in our direction. He discovered us at the same moment we did him, and seemed quite as much alarmed, for he suddenly sheered and made his escape at full speed along the base of the hill. We ran for our arms, which we had left with our horses a few yards below; but before we could get them he was too far off for a shot. He crossed directly in the rear of the train, when he made for the hills, followed by several of the party. Coming to a steep ascent, he ran up it with as much ease apparently as he did over level ground, and soon disappeared. The bear has a great advantage over his pursuers in this respect, as his large and pliable feet, and huge claws, enable him to climb up the steepest acclivity with the same facility as a cat. The color of this animal was of a silvery gray, with a darker or a black stripe down his back.

On entering the plain, our course was west to the southern point of a short mountain range. The country was quite rough and intersected with deep gulleys. On passing this mountain we descended by an easy and gradual slope to a vast open plain, uninterrupted by hills, and bounded on the west by a high range of mountains about twenty-five miles distant. North and south there were no mountains to obstruct the view. Our guide here pointed out to us *El Peloncillo*, or Sugar Loaf, a mountain of this form in the high range alluded to, with an opening near it, where he said General Condé was encamped. He told us we should find no water until we reached there, which it seemed impossible to do before dark. At 3 o'clock in the afternoon we encountered a violent shower of rain. A few of the party had been so prudent as to have their india-rubber coats behind their saddles; but many had left theirs in the wagons which were a mile behind,

Barro Mountains.

and were consequently drenched to the skin. The rain had now made the plain so muddy, that we could evidently not reach General Condé's camp before night; yet Mr. Gray with some of the party who were in advance pushed on with that intention. About 7 o'clock, as we were plodding slowly along, we heard the report of a musket from the wagons in the rear; and taking it for a signal of trouble, we rode back to learn the cause. On arriving, we found that the mules had given out, that the wagons were fast in the mud, and that it was impossible to proceed farther at present. It still continued to rain; but there was no shelter at hand and no alternative but to encamp where we were. The tents were accordingly got out and pitched on the open plain, where at every step the foot sunk three or four inches in the mud. It was with great difficulty that the tents could be kept up, as the ground was so soft that the pins would not hold. But the more serious question was how to make a fire, with no fuel but wet bushes; for not a particle of wood could be found. Nevertheless this was accomplished after much perseverance; and the cup of hot coffee which was the result had a wonderful effect in reviving our spirits. We retired in the midst of the storm, expecting every moment that our tents would fall upon us, but they kept their position, and with the exception of being a little wet, we passed the night more comfortably than could be expected under the circumstances.

August 31*st.* Every thing having been drenched with the rain, we did not get off till after 9 o'clock. The travelling continued exceedingly heavy and the mules showed signs of fatigue and the want of water. Our course still lay west for the "Sugar Loaf." We entered the defile by an easy and almost imperceptible ascent; and after winding along the valley, and crossing an arroyo, we reached the camping ground of General Condé. The camp, however, had been deserted, apparently within twenty-four hours of our arrival. On looking around, we found attached to a pole a note from Mr. Steele, the gentleman I had sent from the Copper Mines to apprise the Mexican Commissioner of the cause of my delay. Mr. Steele stated that in consequence of the limited supply of water, which could only be obtained by digging in the arroyo, General Condé feared there would not be sufficient for us all, and accordingly had removed his camp to *El Sauce*, about twenty miles to the south. Thither he

Approach to Sugar Loaf Mountain.

wished me to follow him, believing there would be found an abundance of water and grass at that place. We pitched our tents here for the night. Latitude of the Sugar Loaf Mountain 32° 20′ 21″—Longitude W. from Greenwich 109° 01′.

September 31*st.* As our animals were greatly fatigued by the two last days' march without water, and with but little feed, it was thought best to remain here to-day to recruit them. Our bedding, being quite wet, was spread out to dry. To employ our time to the best advantage, Lieutenant Whipple was occupied in making astronomical and magnetic observations near the camp and on the summit of a high mountain about three miles to the north. This mountain was found to be 1750 feet above our camp and 2050 above the plain; the party was seven hours in ascending and returning. It presented a picturesque appearance, from the columnar and basalt-like position of the dark and light strata of which it is composed. I employed myself in examining the hills near, and in making a few sketches. There were but few trees here, and these mostly live oak standing in the valleys. The hills were quite bare. While engaged in sketching, halfway up the mountain, I was overtaken by a shower, from which I took shelter in a large natural opening in the side of a rock on the summit of one of the mountain spurs. The rocks here presented many fantastic forms. Among the crevices grew the fouquiera, with an occasional cedar, while the Spanish bayonet and yucca sprang up on all sides. In the distance, on the right, rose the Sugar Loaf Hill, near the base of which was our camp.

We found water by digging in the arroyo near our camp, though the supply was but limited. In my rambles among the hills I discovered several springs of running water; with a little labor therefore I have no doubt an abundance might be procured. In order to apprise General Condé that I was near, and should join him next day, Dr. Webb, with Messrs. Cremony and Thurber, rode forward to his camp.

Rocky Cavern, near Sugar Loaf Mountain.

September 2d. Mr. Steele and a Mexican soldier arrived this morning from General Conde's camp, bringing me word that the General had again removed about twenty-five miles farther to the west, in order that he might be nearer the settlements; as he was getting short of provisions, and should be compelled to go himself or send there very soon for a supply. We left camp at 9 o'clock; Lieut. Whipple, with the wagons, retraced his steps about two miles, when he found an easy passage through the mountains. Mr. Gray and myself took the pack-mules, and, with the assistance of the Mexican guide, followed a shorter cut directly through the defile, where it was impossible for wagons to pass. Our route was tortuous and hilly, hemmed in on all sides by lofty mountains. Two or three miles brought us to the opposite side of

Chiricahui Mountains.

the mountains, when a broad open plain appeared before us about twenty-five miles across, bounded by a lofty and continuons range known as the *Sierra Chiricahui.* Its course, like that of all the other long ranges we had seen, was from the northwest to the southeast, with an irregular and jagged summit, often exhibiting picturesque and fantastic forms. The plain that lay between us and the mountains was unbroken by a hill or a tree. At the northwest the view was limited by a very high mountain apparently seventy or eighty miles distant, which I supposed to be near the Gila. Both east and west of this mountain the country was open. In a southerly direction mountains were visible at a great distance. We entered the valley by a gradual descent. About one third the distance

La Punta de Sauz Cienega.

across the plain, we struck a dry ravine. Following this some eight or ten miles, we reached *El Sauce*, or the Willow Marsh; which seemed to be the basin where the waters collected from the adjoining mountains and slopes. Here was a great abundance of water, which, from the rushes that grew on its margin, I suppose to be permanent. Grass was also plenty here. Lieut. Whipple by observation found the latitude to be 32° 05′ 09″, longitude 109° 02′ 06′.

September 3*d*. There was much alarm in camp this morning in consequence of the absence of John O'Donoghue, one of the computers, who left the track yesterday, and did not rejoin us. It had rained heavily during the night, with thunder and lightning, giving us a pretty thorough drenching, as our tents were in a low and unprotected spot. Sent three men and the Mexican soldier back to our last camp in search of O'Donoghue. The road was now very heavy; and so deep did the wheels sink into the earth, that it was with the greatest difficulty the wagons could be got along. Many times they became so deeply imbedded as to require the aid of several men to relieve them. The pack-mules also had to struggle hard to make their way over the miry soil. Our perplexities were increased by the many small ravines now partially filled with water from the late rains, where the wheels sunk almost to their hubs, rendering it necessary to double the teams in order to extricate them. After journeying in this manner for six hours, and making but twelve miles, we were obliged to stop and encamp without water. We had expected to reach the mountains, now but a few miles off, and did not take the precaution to fill our water kegs. Fortunately we extracted enough from our canteens to make our coffee. One of the wagons got so completely bogged that it could not be extricated; so that I was obliged to send back some pack-mules to take the load, and let the wagon come in empty. Short as this day's journey had been, it was a very severe one on the mules. Latitude of this camp 32° 08′ 33″, longitude 109° 11′ 32″; course north-west.

September 4*th*. This morning the party sent in search of O'Donoghue retured. They had discovered his track, and traced him to the camp which General Condé had just left, where they found a note announcing his safe arrival there, and that he had kept on with the General and his party.

Continued our journey along the base of the mountains; the road still heavy, with frequent arroyos. These, when the banks are steep, are difficult to pass; and in crossing one of them a tongue of one of Colonel Graham's wagons was broken. The day was quite hot, and the poor mules seemed to suffer much from thirst. As we drew near to the mountains we discovered water gushing from their side. We therefore halted; and as the spring was at some distance above the valley, we had to take the mules from the wagons and with much labor lead them up to drink. This was so difficult that a portion of the party kept on, hoping soon to find a place where the precious beverage was more accessible. I observed one of the gentlemen clamber up the rocks and fill his leather cup with water, which he brought several times down the steep hill to give to his suffering horse. At one o'clock, we turned short to the left, and entered a narrow defile with perpendicular sides, and soon after found ourselves in a beautiful amphitheatre among the mountains. Here we found the spot where the Mexican Commission had been encamped, and a note from Mr. Thurber, stating that in consequence of the limited supply of water they had still gone forward. I was greatly disappointed at this news, as there was every indication of the proximity of water in the many surrounding gorges and ravines. All were set about searching for it at once; and after some time thus spent, one of the men happily struck a trail, which he followed half a mile up a ravine, and there discovered a spring and fine pool of crystal water. No time was lost in driving up the mules, horses, cattle, and sheep, and we gladly pitched our tents near a beautiful grove of oaks. I regretted much that General Condé had not discovered this fine spring, the vicinity of which afforded the most eligible camping ground we had yet met with. Lieutenant Whipple observed here, and found the latitude to be 32° 08′ 43″, longitude 109° 24′ 33″.

September 5th. After a few hours' detention to repair Colonel Graham's wagon, we moved forward, and found the mountains more difficult to pass than any we had encountered before, consisting as they did of continuous hills, which required much care on the part of the teamsters; yet, with locking the wheels two or three times, and a little assistance by hand, we soon got through. The length of the pass, with all the sinuosities of our route, did not exceed three miles.

On emerging from the opposite side a broad plain again opened to our view as before, with a range of mountains bordering its western side, about thirty-five miles distant, and running parallel with those we had just left.

This plain appeared, as it subsequently proved to be, destitute of shrubbery or trees, and covered with grass. It was without a hill, and extended in both directions from sixty to eighty miles. A dry lake appeared about midway in the plain; and a closer examination made by some of the party showed that there was water in some portions about two inches deep, but so brackish and muddy that even the cattle would not drink it. From our present elevation above the lower plain, we had a most extended prospect. At the south-west we saw a long line of trees marking a water course or arroyo, which we at first believed to be the San Pedro, though we afterwards found it was not the case. The plain being hard and smooth, with a slight descent, we pushed rapidly forward, and late in the afternoon perceived with our glasses the camp of General Condé, yet a great distance from us. Those who were mounted hurried on in advance of the wagons, and at six o'clock reached the camp, having been in the saddle eleven hours, without taking food, and exposed to a broiling sun. The wagons could not get in, but stopped about five miles back, when they were overtaken by the darkness of the night. The mules too were greatly fatigued.

The water here, which was taken from pools a mile from the camp, was found to be very bad. Not a shrub was to be seen; the grass was poor; rounded heaps of white sand, or patches of bare clay, appeared in all directions. On the whole, we had not before been encamped in so miserable a place. The General had been led here by the report of the existence of a large lake, which turned out to be the dry bed I have mentioned. Finding it impossible to stop there, his men in searching further discovered the pools near which we were now encamped.

General Condé gave us all a warm reception, and invited the officers to his tent, where refreshments were served to us. Mr. Salazar, the Chief Astronomer of the Mexican Commission, arrived here to-day, having finished running the line of the southern boundary of New Mexico through its entire length of three degrees, as agreed upon by the Joint Commission.

September 6th. We were all glad to have a day of rest after our fatiguing journey, even in so desolate a spot. The weather was quite warm, and we felt the heat more than when moving. Our cooks had the greatest cause for complaints; as no fuel could be found but dried grass and stalks of the yucca. These would answer for nothing but to boil a pot; to bake bread was impossible.

General Condé had with him the whole Mexican Commission, consisting of seventy men, besides his officers. This included his military escort, who performed the duty of laborers, and assisted the engineers in the field. He informed us that he had been attacked by the Apaches when encamped at the Sugar Loaf Mountain. They approached, unperceived, within a quarter of a mile of his tent, and drove off his saddle-horses. Another party on the opposite side made a dash at his mule herd, which they attempted to stampede; but the herders were so fortunate as to get the start of them, and succeeded in driving the animals safely into camp. On hearing of our loss at the Copper Mines the General had increased the guard over the mules, but for which he would have lost the whole.

A meeting of the Joint Commission was held to-day, at which all the members were present. On this occasion Mr. Gray first made known his dissent from the agreement entered into relative to the southern boundary of New Mexico, stating, moreover, that "his reasons, and his interpretation based upon them, had been referred to the Government, in pursuance of the 21st article of the treaty." General Condé remarked, that "this course did not agree with the stipulations of the 5th article of the treaty; and that the Initial Point had been determined, and the decision could not be reversed."

September 7th. The Joint Commission met again in my tent; but in consequence of Mr. Gray's illness, adjourned to his, where he and Mr. Salazar presented a plan for continuing the survey. This was adopted, and it was determined to enter upon the duty at once. Mr. Gray and Lieutenant Whipple, with their parties, were to run the Gila portion of the work on the part of the United States; while the Chief Astronomer was to have the entire charge of the Rio Grande survey on the part of the same. Mr. Salazar was to operate with the latter, and General Condé and his officers with the former.

The Mexican Commissioner announced his intention to proceed at once to Santa Cruz, the nearest settlement in Sonora, for the purpose of obtaining a supply of provisions before he could go on with the work. As the American Commission was in a similar destitute predicament, and there was nothing here but brackish water, no wood, and very poor grass, it was determined to proceed without delay to the San Pedro River, one day's journey distant, and there await the arrival of the provisions which were to follow us from the Copper Mines; or, if supplies could sooner be got from Santa Cruz, to obtain them and then go to the Gila. The latitude of this place is 32° 02′ 38″, longitude 109° 48′ 54″.

September 8th. The backs of two of the pack-mules so much galled that they were abandoned here; and General Condé kindly loaned me two of his, to carry their packs. At 8 o'clock A. M. we again set off in a westerly direction, ascending very gradually to a gap in the mountain range, about fourteen miles distant, through which we hoped to find an easy passage. The opening did not disappoint us, as it was very level; but it was an arroyo deeply cut by mountain torrents rather than a defile, and consequently presented a continuous bed of sand and gravel for nearly twelve miles. Its precipitous banks excluded the air, so that the journey was a most disagreeable one. On emerging from the arroyo, we entered a plain, thickly overgrown with large mezquit bushes, but destitute of grass. We looked in vain for a line of trees, or of luxuriant vegetation to mark the course of the San Pedro, and began to fear that we might have still another mountain ridge and another plain to cross before reaching it, when all of a sudden we found ourselves upon its banks. The stream which resembled the Pecos in appearance, though much smaller, was here about twenty feet across, about two feet deep, and quite rapid. The water, though muddy, was pleasant to the taste. We were all exceedingly fatigued with this day's march, having been eleven and a half hours in the saddle and travelled upwards of thirty miles. The latitude of this place by observation was 31° 54′ 31″; longitude, west from Greenwich 110° 11′ 41″.

CHAPTER XVII.

RIO SAN PEDRO TO SANTA CRUZ.

The valley of the San Pedro - Decide on going to Santa Cruz for provisions and mules—Departure of General Condé—Leave the San Pedro—Take the trail of the Mexicans—Deserted Indian village—Leave the trail—Wild horses—Santa Rita Mountain—Beautiful valley—Progress arrested—Critical situation—Mr. Thurber goes in search of Santa Cruz—Arrival of Colonel Graham—Ruined hacienda of Calabasa—Wild scenery—On short allowance—Return of Mr. Thurber—Retrace our steps towards the San Pedro—Mustangs—Camp on the Babocomori—Arrival of Mexican soldiers—General Condé loses his way—Sufferings of his party—Mexicans hunting cattle on the San Pedro—The father and friends of Inez Gonzales arrive—Set out again for Santa Cruz—Meeting of the captive girl and her mother—Arrival at Santa Cruz.

September 9*th*. The valley of the San Pedro River near our camp was any thing but luxuriant. It consists of a loam, which if irrigated might be productive; but as the banks are not less than eight or ten feet high, irrigation is impracticable, except by digging a canal a very long distance. The grass of the vicinity is miserably thin and poor, growing merely in tufts beneath the mezquit bushes which constitute the only shrubbery, and in some instances attain a height of ten or twelve feet. Low hills approached within a mile of the river on the east side, and on the west within a quarter of a mile of that distance. Finding it impossible to graze our animals here, I sent men up and down the stream in search of better grass, which they succeeded in discovering about three miles further south, with springs of water near. I therefore directed the camp to be removed there the next day.

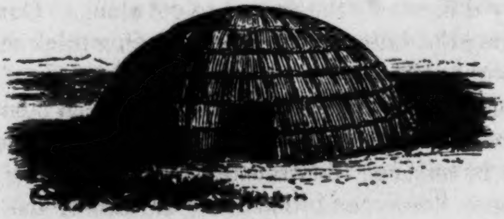
General Condé called, and said he was about to leave with five men for Santa Cruz. In consequence of his offers of service, I requested him to engage for me some flour and beans, both of which I had been informed could be procured there; also to get me twelve mules, as I had just learned that four more of ours had proved unfit for use. General Condé said he had an officer with him who had resided in Santa Cruz some years before, and was well acquainted with the country; that we were not more than twenty-five miles off; and that he should reach there before night. I told him that I would follow him in the afternoon.

Having now decided to proceed myself to Santa Cruz for provisions and mules for the surveying parties, I directed the camp to be removed to the springs, three miles above, and there await my return, which at the farthest I believed would be in a week. This journey, too, would enable me to deliver to her parents the captive girl, who was yet with us. I took leave of Lieutenant Whipple, Mr. Gray, and Colonel Graham, when the latter informed me that he should strike Cooke's California road, which we believed came within a short distance from our camp, and return to the Copper Mines that way. At his request I furnished him with some sheep for his journey.

That no time might be lost, I directed the mules to be hitched up at once, intending to take one wagon for the flour, and a few pack-mules to carry our tents, cooking utensils, and baggage. I hoped to overtake General Condé, but a shower came up, which made it necessary to delay our departure for a few hours. In order to cross the river, it was necessary to level the banks on both sides, and let the wagon down by hand. Our baggage, tents, &c., were all carried over on mules, so that it was five o'clock in the afternoon before we got off. Soon after, it commenced raining, rendering it very difficult for the wagon to get along. Our route lay along the valley due south, through a thick mezquit chapporal. There was no road; but the trail of General Condé's train was a sufficient guide. We had now a gloomy prospect before us; the rain was pouring down in torrents, the travelling was becoming more and more heavy, and the whole surface of the valley was completely deluged with water. Towards evening, finding a little gravelly knoll just large enough to pitch a couple of tents upon, we encamped. Ditches were now dug to lead off the water, and earth was removed to within the tents so as to make them tolerably dry. During the night it rained very hard.

September 10*th.* Mr. Salazar arrived in camp during the night, and remained with us. He was on his way to Santa Cruz. Resumed our journey at 8 o'clock. My party now consisted of Dr. Webb, Messrs. George Thurber, J. C. Cremony, Henry C. Pratt, John J. Pratt, Inez Gonzales, the captive girl, and myself. We had also one servant, one cook, one laborer, one teamster, and three Mexican arrieros, making altogether fourteen persons. Our course continued due south through thick mezquit chapporal, following the trail of General

Condé's party. After marching about eighteen miles the trail turned abruptly to the west, along the base of some high detached hills; these we followed about five miles, when we encamped near a water hole. There was here a collection of twenty or thirty wigwams, made of poles, bent over in a circular form and well thatched with straw, the whole so completely done that they must have been a permanent abode for their occupants. From all appearances the place had been deserted a year or more. In the midst of these wigwams was a circular pit lined with stones, where the distilling of mezcal had been carried on, on a large scale. Inez said she had never seen such wigwams among the Apaches, and that it must have been a village of the Papagos Indians. There were many fragments of pottery scattered about.* Dr. Webb rode ahead with Mr. Salazar this morning, and did not rejoin us. He doubtless reached General Condé's party.



Indian Wigwam.

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* I afterwards learned that this was a place where Papagos Indians resorted annually to collect the Maguay, and distil the liquor; and that about a year before our visit, they were surprised by the Apaches and some fifty men, women and children, killed or taken prisoners.

September 11*th.* We followed the wagon trail for several miles, till at length it turned off in a north-westerly course. At this I became uneasy, knowing that Santa Cruz, whither we were bound, lay to the south. Not knowing but General Condé might have gone that way to avoid some deep ravine, although I could see none, I came to a halt, and sent Mr. Cremony ahead for a mile or two to see whither the trail we were following led. He reported that it kept the same north-westerly-course, and seemed to be following a well-marked Indian trail. I now became satisfied that General Condé's party had mistaken their route, and that by following it, they must reach *Tucson*, a military post towards the Gila. I had now come, since I changed my course yesterday, about eight miles out of the way. I determined therefore to leave the trail and go south over an open plain, towards a high mountain; and this direction we pursued until four o'clock, when we encamped near a little pool of water. The whole face of the country had changed to-day, in fact since we had left the valley of the San Pedro. From that river we had ascended to a plateau of an undulating character, similar to the western prairies. It was covered with short grass; and in the depressions, some of which were fifty or a hundred feet lower than the plain, we found pools of water, more luxuriant grass, and groves of small oaks.

We saw for the first time to-day a herd of *mustangs*, or wild horses. They at first caused us much alarm, as we took them for a party of Indians; but a close examination with a spy-glass disclosed what they were. When within half a mile of them they discovered us, and soon disappeared from view. Many deer and antelope were also seen.

On our right, about ten or twelve miles distant, a lofty range of mountains, one of which, towering far above the others, terminated in a peak. We afterwards learned that this was called the *Santa Rita* Mountain. It was altogether the most magnificent that we had seen. Spurs extend from it five or six miles towards the plateau, and its sides are deeply furrowed with gorges and ravines. At sunset, when a deep shadow was thrown over it, its appearance was truly grand. We all went up on the plateau to enjoy the scene, and Mr. Pratt devoted the daylight that remained to taking a sketch of it.

September 12*th.* On setting out we ascended the plateau again from our encampment, but dropped down soon after into a valley which extended several miles towards the south, its banks studded with oaks. The grass continued rich and abundant, with frequent pools of water from the washings of the adjacent hills. Six miles brought us to a hill some five or six hundred feet high, which lay directly across our path. In every direction, except around the western base of the hill on which we stood, arose higher hills and lofty mountains intersecting each other, and presenting an impassable barrier to our progress. After three hours' detention spent in search of a passage, we retraced our steps for a short distance, and by surmounting several low, though very steep hills, crossing many ravines, over which it was necessary for every man to put his shoulder to the wagon, and wading through a swamp, where the rank grass reached above our heads, we succeeded in rounding the hill before referred to on its western side, and in dropping into the valley beyond. Here we found a small stream of clear and sweet water running through the valley. Pursuing still a course nearly south for about ten miles, we approached the base of the high and isolated mountain, when the stream and valley turned suddenly to the west. Continuing along it for a mile, we encamped near a grove of large cotton-woods, in the midst of tall grass, within a little nook protected on three sides by steep hills. Here we were admirably concealed from an enemy, except in front, where lay the valley and stream. The latter, increased by rains from the adjoining mountains, had now become a rapid stream, and was closely hemmed in by willows, which rendered it difficult of approach. The valley for the last ten miles of our march resembled an old and highly cultivated place, from which the people and their habitations had suddenly disappeared. Large cotton-wood trees and willow bushes lined the stream, while here and there in little groves were beautiful oaks and large mezquit trees; for the latter, although adapted to every soil, becomes a large tree in a rich soil like this. It seemed that each grove, as we approached it, must conceal some dwelling place and cultivated grounds; but in reality all was solitude, and there was no evidence that a furrow had ever turned the virgin soil, or a seed had even been sown there.

September 13*th*. Believing that by following the stream we should strike a road or path that would guide us to our place of destination, we continued our course along the base of the low hills which bound the valley, but were very soon arrested in our progress. The valley gradually became contracted as the two great mountain ranges approached each other, leaving only a defile, about a quarter of a mile in breadth, through which the water had burst a passage. This defile was filled with gigantic cotton-woods, with an undergrowth of rank grass, weeds, and jungle, rising above our heads even when on horseback. Among them grew a vine, binding all together; so that it was impossible to force a passage through. Farther progress here was therefore at an end. But perceiving on the elevated ground of the side of the valley, a cluster of deserted adobe buildings, I sent a party across to see if there was any egress in that direction; while I went with Mr. Cremony and Mr. Pratt over the hills, and along the valley ahead. A few hundred yards before us a perpendicular wall of rock rose directly from the valley, or rather from the stream which ran at its base. The hills on all sides were steep, high, rocky, full of the most frightful chasms, and utterly impassable for a wagon. For the half mile that I went I had to lead my horse; and I doubted whether an animal under a heavy pack would be able to clamber the steep and rocky crags that lay in our way. The valley too, where I depended chiefly on finding a passage, had become an impenetrable swamp. From a high hill, which I ascended, it could be traced for a long distance by the bright green hue of its vegetation; but the rugged mountains hemmed it closely in, their summits, from the bird's-eye view I had of them, appearing like the huge waves of a tempestuous ocean, suddenly turned to stone. Frightful chasms where mighty convulsions had rent the mountain asunder, and deep ravines worn by the torrents of centuries, appeared on every side. Bare rocks projected here and there, gray and mossy with age, and appearing like ruined castles. But amid all this sterile grandeur there was a rich and varied vegetation. The graceful agave thrust up its tall and slender stem from among the rocks; the yucca and Spanish bayonet monopolized as usual every spot where there was a few inches of earth or gravel; while the fouquiera with its thorny stems was well represented. Cedar and stunted oaks jutted from many little depressions where there was sufficient soil to give them a foothold.

Mr. Thurber, who went to examine the opposite side of the valley, reported that a passage for mules might be found in that direction by following an old Indian trail which passed the ruined hacienda; but for a wagon no egress could be discovered. No alternative now remained but to retrace our steps with the wagon, or to transfer its contents to the banks of the mules and abandon it. I decided on the latter course. Being without pack-saddles, we took as substitutes our tents and wagon cover, which were folded in a convenient form and laid over the mules' backs. Our blankets were converted to the same use; and then five mules were prepared for their loads. The contents of the wagon were then put upon the mules and fastened as securely as possible. The next thing to be done was to cut a passage through the jungle with axes, to enable us to cross the stream and valley. This being accomplished, we moved off, leaving the wagon, harness, tables, camp-stools, and such other articles as we could dispense with without serious inconvenience.

On reaching the stream, one of the men led the way, followed by one of the pack-mules. The creature sank deep into the mud; but with a good deal of struggling on its part, and urging on that of the arrieros, it got safely across, the pack turning as soon as the mule reached the bank. The next two fell in the middle of the stream, and became fast in its soft and muddy bottom, their packs falling over into the water. After unavailing efforts to get them along, and fearing they would drown themselves in their struggles, the packs were cut loose and taken off; and then, with several men in the water lifting, and others on the bank pulling, the mules were released from their miry beds and brought back to the firm soil. My own baggage and papers got drenched as well as most of the blankets and bedding of the party. Some of the horsemen in attempting to cross, also mired; and as we had six more pack-mules to get over, I abandoned my efforts; not so much from the difficulty of passing the stream, as of keeping the packs on the mules without ropes. The straps and rigging of two mules had been ruined in our exertions to save the animals. We now returned to our abandoned wagon; and finding it impossible to proceed, I determined to send a party by the trail discovered near the old hacienda, to Santa Cruz, for a guide, and such aid as would enable us all to reach there. I believed that this place was now within ten or twelve miles of us, and that a party going south, must strike the emigrant road to California, which passes through it.

Mr. George Thurber at once volunteered on this duty, in which he was joined by Mr. J. J. Pratt. A

Mexican arriero accompanied them to take care of their animals, and render such aid as they might stand in need of. Within an hour after this had been determined on the party were off; and as they believed they could reach Santa Cruz before night, they took with them merely a supply of bread for a couple of days. When they had left, we removed from the dense thicket around us, and retraced our steps about half a mile; we then pitched our tents between two spurs of the mountain, where we could not be discovered, except from the front. The cotton-wood trees in the spot where our march was arrested were the largest we had ever seen. I measured the girth of one, about five feet above the ground, and found it twenty-eight feet. Its limbs spread full forty feet on every side, and a large party might have encamped beneath its ample shade.

In the afternoon we were surprised by the appearance of a man on horseback coming at full speed towards our camp. He proved to be Guadalupe, one of Colonel Graham's servants, who, greatly to my surprise, informed me that the Colonel was following my trail on the way to Santa Cruz; that he was very short of provisions; and that he (Guadalupe) had hoped to reach there in advance and obtain some, in case I could not furnish them.

September 14*th*. We now found ourselves very short of provisions; for, relying on the Mexican's assurances on the San Pedro that we were within twenty-five miles of Santa Cruz, I had provided myself with only five days' supply of flour, and three of meat, with other necessaries for a week. As soon as I discovered that we should not reach there as soon as anticipated I cut down the daily allowance of flour one half. Our meat being fresh, was soon exhausted; so that by this time our supply of every thing was very scanty. Several of us set out in search of game; but although deer were seen, we were not fortunate enough to kill any. I perceived the traces of turkeys among the cotton-wood, and watched for hours beneath them; but they came not. Mr. Pratt rigged up a fishing line to try what he could find in the brook. His labors were attended with success; and our dinner table was served with a plentiful supply of trout, which, though small, were a welcome addition to our bill of fare. We also found near the camp an abundance of purslain (*portulacca*). This was collected and boiled, and formed our chief food. In the absence of vegetables, which we had not tasted for a long time, we all relished it very much.

September 15*th*. Colonel Graham and his party joined us this morning. He came a few hours in advance, with Messrs. Wright and Clarke, in consequence of the sad tale brought back by Guadalupe, who told him we were "*half starved* and *living on roots*." The Colonel brought us his haversack filled with bread and meat, and a bottle of wine. He himself was quite short of provisions, though much better off than we were; and having killed a bear in his journey, he had had an abundant supply of fresh meat. This kind of meat, however, will not keep, and is not good after the second day, except in cold weather.

I took my rifle and went out again in search of game, following a deep ravine far up towards the

Santa Rita Mountain, and was so fortunate as to get a shot at a turkey, which I brought down. He proved to be a very large one, and a pretty good load to trudge over the hill and rocks with. This gave us all a fine dinner. Sent all hands out towards evening after game, but none was found.

September 16*th*. On examining his provisions, Col. Graham found he had sufficient to give all half allowance of flour for six days, which was accordingly distributed, and proved very acceptable. He also had a little salt pork, but no sugar, tea, or coffee. These things we had not tasted for many days. But with half an allowance of flour, and as much purslain as we could eat, we did not suffer much. Our fare to be sure was humble enough; but I am sure we relished it infinitely more, and felt more thankful for it too, than those whose tables are loaded with every luxury, and still have to resort to artificial means to increase the appetite. My mess was now reduced to four, viz., Mr. Cremony, Mr. Pratt, the fair captive, Inez, and myself.

Colonel Graham set off this morning to reconnoitre the country a few miles to the south, while Mr. Pratt and myself crossed the stream, and ascended the mountain on the opposite side. We also examined the ruined hacienda, before spoken of, which seemed to have been abandoned many years before, as much of its adobe walls was washed away.* Our reports coincided as to the utter imposibility of forcing our way through the mountains, except with pack-mules. Mr. Pratt made some sketches of the wild and picturesque scenery around us. No game was seen to-day.

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* We afterwards learned that this was a noted cattle hacienda, known as *Calabasa*, i. e., the pumpkin or gourd. Why so named, I know not, except from the quantity that grow wild in the valley near.

September 17*th*. Began to feel much anxiety for the return of Mr. Thurber and his party, as they took but a small supply of bread with them. I did not think it proper to move until they rejoined us; for in case they had not succeeded in procuring aid, they would be in a sad strait for food.

About ten o'clock they were discovered slowly wending their way among the hills, and were soon after among us. Their journey had been unsuccessful. They had traversed the country, as they estimated, some thirty miles west and north-west, till they struck a well-beaten wagon road; and had visited many deserted ranchos, and two depopulated towns, in both of which were churches. They had suffered much for want of food, having subsisted chiefly upon peaches, which they found in abundance in the orchards of the deserted towns, and upon the fruit of the prickly pear and yucca. In returning they followed the road some twenty miles in the opposite direction, but found not a living soul.

No time was now to be lost. Our provisions, even on half allowance, were fast diminishing; and the only alternative was to retrace our steps as fast as possible to our camp on the San Pedro. The wagon and pack-mules were at once got in readiness; and by noon we bade adieu to our "lost camp." Made about fifteen miles, and encamped in a fine oak grove, with wood, grass, and water.

September 18*th*. Got an early start; and instead of following the roundabout way we had come, I determined to make a short cut across the prairie, which seemed quite open to the base of a conical hill, thereby saving eight or ten miles. Found the country undulating and quite smooth; and the grass, though green, was short, presenting no obstruction to the wagon. Small oaks appeared in every depression; with a few on the plain. At noon we struck the sources of a small stream running eastward, bounded by a broad and beautiful valley, into which we descended. This proved to be the *Rio Babocomori*, a tributary of the San Pedro. We followed it until three o'clock, when we encamped near the ruins of a large hacienda, which stood immediately on its banks.

I would have gone further, but Colonel Graham, with his party, instead of taking the shorter cut with us, had followed the trail which he took out, thus lengthening the distance considerably. As we were in a very good place, with water, wood, and grass, near at hand, I sent the arrieros across the hills, to intercept the Colonel when he came along, and direct him to our camp. At six o'clock he arrived.

When passing the stream to-day, we were startled by a singular cry from the top of a cotton-wood tree, which overhung our path. It was found to proceed from a young panther; when a well-directed shot by Mr. Cremony, brought the animal down. It proved to be not much larger than a cat, and of light brown, or tawny colour. Another incident, was the meeting with a herd of about a dozen wild horses. They gazed on us for some time, with heads and tails erect; they finally got our wind, when they bounded gracefully over the prairie in a single file, led by a large black stud. Before we had our tents pitched, Mr. Pratt got out his fishing-tackle to see what the stream could furnish; and his industry was rewarded with a good mess of fish, which helped to eke out our scanty dinner.

September 19*th*. Deeming it advisable still to go to Santa Cruz, to deliver up our fair captive, as well as to procure some mules and provisions, in case those expected from the Copper Mines had not arrived, I sent two men off this morning before day-light with a note to Mr. Gray at the camp, on the San Pedro, which I judged to be from twenty to twenty-five miles distant. Informed him of our situation, and requested that he would send us four sheep, and some sugar, coffee and biscuit, from my private stores, all of which they could bring upon their mules.

Soon after breakfast two Mexican soldiers came in on the run, and presented me a letter. It was addressed "To any person connected with the Mexican or the American Boundary Commission," and proved to be from General Condé. The General stated that, after eight days wandering among the mountains and on the plains, he had reached Santa Cruz; and not having seen or heard of the Mexican or American Commission since he left the camp on the San Pedro, he had sent couriers to trace them out, inform them of his safe arrival, and guide them to Santa Cruz. He and his party, consisting of four of his officers, had left in advance of the main body, and failing to reach their place of destination, had slept in the mountains. Expecting to reach Santa Cruz before night, they had supplied themselves with but two days' provisions and one blanket; and hence had suffered greatly for the want both of food and covering. The first day and night it had rained hard, as will be remembered. It seems that they crossed the Santa Rita mountains somewhere, and reached the deserted ranchos and towns where Mr. Thurber had been. Taking the California road,* they followed it southwardly, and first fell in with a settled place at Imuriz, a town about seventy-five miles south of Santa Cruz. They had subsisted meanwhile on peaches, which they found in the deserted villages and ranchos, and upon the bean of the mezquit.

These couriers had left Santa Cruz but the day before, and soon after they fell upon a trail which proved to be ours. They told us that we had been only some ten or twelve miles from that place; and that had Mr. Thurber pushed his search to the left of the mountain, instead of following the stream to the right, he would in three or four miles have struck a valley and trail leading to his place of destination. I now began to feel anxious on account of Dr. Webb and Mr. Salazar, but hoped they had joined the main body of the Mexican party, which I still believed had gone to *Tucson*.

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* I have before stated that the California road goes through Santa Cruz. The direct road it appears passed the mountains three miles north of the town, thereby saving a detour of about ten miles. The emigrants however that traverse this road, generally visit the town; but as few had gone this way the present season, the turn off to Santa Cruz, which is at San Lazaro, had become almost obliterated, and General Condé overlooked it, keeping along the main road, which continues to Imuriz, and Santa Madelena.

I proposed to Colonel Graham to send one of his men to the San Pedro camp, advising Lieutenant Whipple and Mr. Gray of the information we had received; and in case any of the Mexican Commission had found its way back, to apprise them of General Condé's arrival in Santa Cruz, and direct them to our camp, where they would find the couriers and guides. As the Colonel required a supply of fresh meat to carry him back to the Copper Mines, I sent, at the same time, for eight sheep for him and his party. Colonel Graham accordingly dispatched one of his soldiers to the San Pedro camp.

A few fish were taken to-day; and fortunately we found near the old hacienda, a plentiful supply of purslain, so that with the little flour we had, we got along very well and without much complaint from the men. I felt quite ill myself from the exposure to the sun and insufficient food: and lay most of the day in the shade beneath the bushes which grew on the river's bank.

The valley of the Babocomori, is here from a quarter to half a mile in breadth, and covered with a luxuriant growth of grass. The stream, which is about twenty feet wide, and in some places two feet deep, winds through this valley, with willows, and large cotton-wood trees growing along its margin. Some of our men followed it about seven miles, to its junction with the San Pedro. This hacienda, as I afterwards learned, was one of the largest cattle establishments in the State of Sonora. The cattle roamed along the entire length of the valley; and at the time it was abandoned, there were not less than forty thousand head of them, besides a large number of horses and mules. The same cause which led to the abandonment of so many other ranchos, haciendas, and villages, in the State, had been the ruin of this. The Apaches encroached upon them, drove off their animals and murdered the herdsmen; when the owners, to save the rest, drove them further into the interior, and left the place. Many of the cattle, however, remained and spread themselves over the hills and valleys near; from these, numerous herds have sprung, which now range along the entire length of the San Pedro, and its tributaries.

September 20th. The soldier, whom Colonel Graham had sent to the San Pedro camp yesterday afternoon, returned this morning, and reported that when he had got within a short distance of the camp, he discovered a party of thirty or forty Indians, and in order to avoid them, he had concealed himself in a ravine, where he had passed the night. From this place he had made his way back to our camp, without reaching Lieutenant Whipple. I questioned this man as to the certainty of the people whom he saw, being Indians. He said *they were a mile off;* but seeing feathers in their hair, the peculiarities of their dress, and their galloping with speed over the plain, he felt sure they were such. Colonel Graham manifested much uneasiness, and now proposed that we should all proceed to the camp on the San Pedro, return with Messrs. Whipple and Gray to the Copper Mines to refit, and take a new start; or that all should go to Santa Cruz for the same purpose. I did not believe the people seen were Indians; and as the engineering parties were but two or three days' journey from the point where they would begin their survey, I could see no advantage in retracing our steps to the Copper Mines. We had no time to lose; and if our supplies were not sent us, I believed that we could get flour and such articles as were absolutely necessary at Santa Cruz, or some other place in Sonora, so as to enable us in a few days to proceed to the Gila. Mr. Cremony, who doubted the soldier's story, volunteered to go to the San Pedro camp with a single man, if I would permit him. On my accepting his services, he selected a trusty and courageous Mexican named Leonidas, and started at once on his errand.

Mr. Cremony had scarcely left, when Antonio and Carroll, the two men I had sent off early yesterday morning for the sheep, returned. They had followed the San Pedro to the mouth of the Babocomori, thinking we should move our camp that way; and had fallen in with a party of thirty or forty Mexicans, who had a camp and a corral near the San Pedro, and were engaged in hunting wild cattle. They told the Mexicans who we were, and of our desire to get to Santa Cruz; for when they left us, the couriers had not arrived from General Condé. They also informed them that we had with us a captive girl named Inez Gonzales, whom we were about restoring to her family. The Mexican party were all from Santa Cruz; and, singularly enough, the father, uncle, and many of the friends of Inez, were among them; in fact, there was scarcely one of the number to whom she was not known. This was the first intimation that they had received that the poor girl was living, and had been rescued from her savage captors. They required no urging, but to a man left their hunting ground, and accompanied Carroll to our camp.

The joy of the father and friends in again beholding the face of her whom they supposed was forever lost from them, was unbounded. Each in turn (rough and half naked as many of them were), embraced her after the Spanish custom; and it was long ere one could utter a word. Tears of joy burst from all; and the sun-burnt and brawny men, in whom the finer feelings of our nature are wrongly supposed not to exist, wept like children, as they looked with astonishment on the rescued girl. She was not less overcome than they; and it was long before she could utter the name of her mother, and ask if she and her little brothers yet lived. The members of the Commission who witnessed this affectionate and joyful scene, could not but participate in the feelings of the poor child and her friends; and the big tears as they rolled down their weather-beaten and bearded faces, showed how fully they sympathized with the feelings of our Mexican friends.

The captain or leader of the party was Don Ilarion Garcia, a gentleman of intelligence, from whom we obtained much interesting information about the country. He was a merchant and government contractor; had been in California; and was well acquainted with Colonel Fremont, and the pioneers of that State. He told us of mines in Sonora that produced ores of gold, silver, cinnabar, and copper, in several of which he possessed an interest.

After leaving our Mexican friends awhile to themselves, I returned to my tent, to learn the news. They all assured me that the restoration of a young female to her family, after being carried off by the Indians, was an event unknown to them. Boys occasionally escape from their captors, and find their way again to their homes; but young women are generally forced to marry, and when they become mothers, they have no desire to return. It was gratifying to the fair captive to learn that her mother, brothers and sisters, were well; though her mother still pined for the loss of her daughter, under such painful circumstances.

Two of the party dined with me on the scanty fare I could offer them; after which they all returned to their camp, except the father and uncle of Inez, who remained to accompany us to Santa Cruz. Finding that we were short of provisions, they sent us a fine quarter of beef.

Mr. Cremony returned at nine o'clock in the evening, and reported that all were well at Lieut. Whipple's camp. Mr. Gray, with two or three others, had left several days before for Santa Cruz. We felt considerable anxiety on their account; for as they had not reached there when the couriers left, it was pretty certain, that, like the rest of us, they had missed their way.

September 21*st.* It rained all day, making it impossible to move. More of the hunting party on the San Pedro, visited our camp, to see the captive girl. The men who were unprovided with tents, and the cook, took up their quarters in the old hacienda, where they were sheltered from the rain.

September 22*d.* Set off once more for Santa Cruz, recrossing the stream, and passing around the northwestern extremity of the Sierra. Our course was then due south to a range of hills, through the valleys of which we pursued our way among scattering live oaks, which greatly impeded travel. There was a well-marked trail here, but no wagon road. We were often brought to a stand by the overhanging limbs of the trees, which it was necessary to cut away; and in spite of all our precautions, the wagon bows were broken. Met a party in a thicket engaged in drying beef, who invited us to help ourselves to as much meat as we wanted from a bull they had just killed; a permission of which we thankfully availed ourselves. At 5 o'clock, encamped among the hills in a thick wood, near a small rivulet.

September 23*d*. Resumed our march at 8 o'clock, our course still south, through a wood quite difficult for the wagons. A few miles brought us to the *puerta*, or gate in the mountain; passing which, we emerged into a very broad and open plain of remarkable beauty. From the elevation where we first saw this valley, the prospect was exceedingly picturesque. Around us grew the maguay, the yucca, and various kinds of cacti, together with small oaks; while beneath us, the valley spread out from six to eight miles in width, and some twelve or fifteen in length. Unlike the desolate and barren plains between the mountain ridges, which we had crossed between the Rio Grande and the San Pedro, this valley was covered with the most luxuriant herbage, and thickly studded with live oaks; not like a forest, but rather resembling a cultivated park. While the train was passing down the mountain, I stopped with Mr. Pratt to enjoy the scene, which he hastily transferred to his sketch-book. Opposite from where we stood, and not more than five miles distant, were the mountain and gorge, where we had been encamped for five days, endeavoring to find a passage through. At the further end of the valley into which we were descending, lay Santa Cruz. I now saw that if I had continued my course due south, as I first intended on leaving the San Pedro camp, I should have struck this valley the second day; but by following the trail of the Mexican Commission, I was led about eight miles too far west. This brought us on the opposite side of the Sierra, and led us into the gorge from which there was no egress. In passing down the valley, we met Mr. Salazar and Mr. Henry C. Force, with a small party from Santa Cruz bound for the camp on the San Pedro, and the Gila. They informed us of the safe arrival at Santa Cruz of the Mexican Commission, Dr. Webb and Mr. Gray.

Before setting out this morning, two men started in advance to advise the mother of Inez of our approach, and when within two miles of the town, we saw a small party approaching, partly on mules and partly on foot, among whom were the fair captive's mother, brothers, and uncle. As we drew nearer, Mr. Cremony helped Inez from the saddle, when in perfect ecstasy she rushed to her mother's arms. Words cannot express the joy manifested on this happy occasion. Their screams were painful to hear. The mother could scarcely believe what she saw; and after every embrace and gush of tears, she withdrew her arms to gaze on the face of her child. I have witnessed many scenes on the stage, of the meeting of friends after a long separation, and have read highly-wrought narratives of similar interviews, but none of them approached

VALLEY LEADING TO SANTA CRUZ, SONORA.

in pathos the spontaneous burst of feeling exhibited by the mother and daughter on this occasion. Thanks to the Almighty rose above all other sounds, while they remained clasped in each other's arms, for the deliverance from captivity, and the restoration of the beloved daughter to her home and friends. Although a joyful scene, it was a painfully affecting one to the spectators, not one of whom, could restrain his tears. After several minutes of silence, the fond parent embraced me, and the other gentlemen of the party, in succession, as we were pointed out by her daughter; a ceremony which was followed by her uncle, and the others, who had by this time joined us. We then remounted our animals and proceeded towards the town in silence; and it was long before either party could compose themselves sufficiently to speak.

As we journeyed on, we met other villagers coming out to meet us, and among them two little boys from eight to twelve years of age. They were the brothers of Inez; and when they saw their sister, they sprung upon the saddle with her, clasping their little arms around her, and like their mother, bursting into tears. Releasing their embrace, Inez pointed to us, when the little fellows ran up to our horses and eagerly grasped our hands, trotting along by our sides, while the tears rolled down their cheeks. A little further, we were met by another lad about twelve years of age. He too, embraced the returning captive, and like the others, burst into tears. But those tears were excited by feelings very different from those awakened in the other boys, the brothers of Inez. They were tears of despair—of long cherished hope checked in the bud;—of disappointment—of pain—of misery! This poor boy was the child of the woman who was made a captive by the Apaches, at the same time with Inez. She and Inez had left their homes together, one year ago this very day, for the fair of Madelena, where their party was when attacked by the Apaches, and all but three killed or taken prisoners. Of the three who were made captives, no news had ever been heard; and the poor girl now returning, was the first intelligence that either was in existence. The little orphan wrung his hands with despair as he raised his eyes first to the companion of his mother, and then to us, thinking perhaps that we might have regained his parent, as well as her. I was much affected when Inez told me who this lad was, and resolved that I would make an effort for her restoration too, as soon as I could communicate the particulars to the government, as she is the person who was bought by the New-Mexican traders, and taken to Santa Fé, a short time before the purchase of Inez.

As we drew near the town, numbers of the inhabitants came out to meet us, and welcome back the restored captive. When about half a mile distant, Inez wished to dismount and walk thence to the church, that she might first offer up her prayers for her deliverance from captivity, before going to her home. Accordingly we all dismounted and accompanied her to the door of the church; and there she was met by many more of her friends, when they all passed forward and knelt down before the altar. We left them engaged in prayer, and waited outside the church until their devotions were concluded. They then passed out, and escorted Inez, her parents, brothers and sister, to their home.*

We pitched our tents just beyond the walls of the town, preferring them to the adobe houses which General Condé had kindly placed at my disposition.

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* I have spoken of the father of Inez Gonzales. He was in fact, her step-father, and named Jesus Ortis. He seemed ardently attached to her, and told me he loved her as his own.

CHAPTER XVIII.

SANTA CRUZ TO LA MAGDALENA.

Account of the missing parties—Description of Santa Cruz, and its population—Departure of Colonel Graham—Set out for La Magdalena—Increase of party—San Lazero—Cocospera—Its beautiful Valley—The cañon where Inez Gonzales was taken—First sight of the Cereus Giganteus—Babasaqui—Wild cattle—Imuris—Terrenati—San Ignacio—Its church—Abundance of Pomegranates—Passports demanded—Proceed to Magdalena—Summoned before the Alcalde—Legend of the origin of the town—Festival of San Francisco—Religious Devotees—Offerings to the Saint—Consecration of ribbons—Booths—Gambling—Perpetual fandango—Vegetable productions near the town—Fine scenery—Grand torchlight procession—Close of the Festivities—Description of La Magdalena.

September 24*th*. General Condé informed me that he had engaged for me fifteen hundred pounds of flour, but that no other provisions could be obtained, so great was the dearth caused by the frequent incursions of the Apaches. I called on Captain Barragan, the Commanding officer, to procure a portion of this flour at once, to send to Lieut. Whipple and the party on the San Pedro. There was a small grist-mill here under the charge of the Commandante; but there was no stock of flour on hand, and he was then grinding some for the Mexican Commission. Consequently he could only spare me a small quantity for the parties in

Santa Cruz, but promised that he would let me have some the following day.

Some account of the several missing parties may not be improper in this place. The Mexican Commission, on whose trail I depended, and which led me out of my proper course, followed an Indian trail the second day after leaving the San Pedro, which led them to the town of *Tucson*, a military post ninety miles from the Gila and about one hundred from Santa Cruz. They met with great difficulties in crossing the Santa Rita mountains, and were compelled to abandon their wagon. From there they took the road to Santa Cruz, which they reached in five days. Doctor Webb and Mr. Salazar, who proceeded in advance the day after we left the San Pedro, overtook the main body of the Mexican Commission, as we had supposed, and continued with it. Mr. Gray, in his attempt to reach Santa Cruz, followed the same trail, and also brought up at Tucson, from which he took a new start and arrived at the former place.

Santa Cruz is one of the nine *presidios* or military posts on the frontier of the State of Sonora, the others being Tucson, Fronteras, Babispe, Bacuachi, Tubac, Altar, San Carlos, and Hermosillo. It was formerly a place of considerable importance, with about fifteen hundred inhabitants; but at present its population does not exceed three hundred. It possesses a fine valley and bottom land of the richest soil, and is irrigated by a small stream bearing its own name, which has its rise in springs about ten miles to the north, in the beautiful valley through which we entered the place. It is admirably adapted for the raising of cattle and horses, as well as for all kinds of grain. Wheat, in particular, does remarkably well here. The *Chili colorado* (red pepper), of which such quantities are consumed in Mexico, grows here in perfection, and is said to be preferred on account of its superior piquancy to any raised in Sonora. The climate is milder than in either the southern or northern parts of the State. In the winter it is subject to severe frosts, so that the river freezes and snow often lies on the ground for several days. It is, however, a very sickly place, the inhabitants suffering from bilious fevers, in consequence of the proximity of a large marsh three miles west of the town. Many were ill at the time of my visit, and I was desirous to get away as soon as possible.

Santa Cruz, Sonora.

This place has suffered more than any other on the frontier from the inroads of the Apaches, it being on the principal route of communication with the interior from the north, as well as with the settlements of the civilized Indians. The place had become much reduced and impoverished by the frequent incursions of the Apaches, which prevented the inhabitants from cultivating the soil, except in the immediate vicinity of the town. If they suffered their cattle to stray two miles off, a band of skulking savages would emerge from some thicket where they lay in ambush, and drive them off. If but two or three men were tending them, they were either murdered or compelled to seek safety in flight. In such a miserable state of existence were these people, that they could scarcely venture beyond the walls of their town, except in parties of six or eight, who must then be well armed; and if they wanted to go any considerable distance, it was necessary to form large parties for mutual protection. It was in September, 1850, when the party with Inez were cut off about twenty miles from Santa Cruz, which led to the complete abandonment of the place. A few months, however, before our arrival, a brigade was raised by General Carrasco, for the protection of the frontier. The presidios were then strengthened; and Fronteras, Santa Cruz, and others, which had been abandoned, were again occupied by their poor and wretched inhabitants.

I was detained here until the 29th, waiting for the flour and *pinole* for the Gila parties. A portion had been procured and sent forward several days before, and Mr. Gray remained behind for the remainder. But two mules could be obtained here, for which I paid seventy-five dollars each. I also procured some flour for Colonel Graham. On the 28th, he took his departure for the Copper Mines, where his engineers and the party for the survey of the Rio Grande, were still awaiting his return.

During our stay here, Dr. Webb was engaged three quarters of his time in attending the sick; for in addition to the many that were suffering with fever, there were cases of a more complicated nature, which required the performance of surgical operations. For his services he made no charge. One would suppose that after attentions of this kind, and the restoration of one of their number from captivity, some little gratitude would have been shown us by the people of this place; instead of which, however, depredations were nightly committed in our camp. Meat was stolen from the pot in which it was cooking; blankets were taken from the men while asleep; and all the ropes and iron stake-pins that secured our animals were carried off. These last were a serious loss to us, and could not be replaced. We were finally compelled to keep the people away from our camp; and I felt it my duty to complain to the Cura of the pilfering propensities of his flock. He was fully aware of their thievish disposition, but was unable to restrain them. Many wanted to be employed as arrieros; but after the examples we had of their dishonesty, I thought it prudent to have as little to do with them as possible. I engaged, however, Jesus Ortis, the father-in-law of Inez, to be our guide to Magdalena, and further if necessary.

September 29*th*. Being unable to procure any thing at Santa Cruz but flour, I determined to go to Magdalena, a town seventy-five miles further south, where I was told I could find mules, and such articles of provisions as I required. The annual fair of San Francisco was to take place in a few days; and there, it was believed, would be a supply of every thing, particularly mules, of which I was most in need. I believed I could get back in ten days, and immediately after join the parties on the Gila.

When we came to get the mules in, we found that one was missing. I suspected that some of our dishonest friends had concealed it until after we should leave, and requested Captain Barragan to secure it, if it should be seen.

My journey to Magdalena was taken advantage of by many of the people of Santa Cruz, who wished to go to the fair; so that when my party was ready to move, I found it increased by fifteen men and two women, all mounted on horses, or mules, like ourselves, making altogether a cavalcade of thirty-one persons, besides our pack-mules. The Mexicans were all clad in their holiday dresses, and presented quite a picturesque appearance. The men wore chiefly roundabout jackets, with pantaloons open at the sides, showing their large white cotton drawers beneath. Some of their pantaloons were lined with pink or sky-blue; and in every case they were decorated with a row of bell-buttons, or clasps, extending from the hip to the ankle. Suspenders they never wear, a red silk sash being generally used to keep the pantaloons in their place. Every man also carries with him a *serape*, or blanket, which in the cool of the morning and evening is thrown gracefully over his shoulders, and at night is used to cover his body. During the heat of the day, it is folded up and laid across his saddle, or fastened on behind. The women always wear the *reboso*, a scarf which covers the head and neck. In other respects, there is nothing peculiar in their dress, except that they prefer very gaudy colors.

Our road was said to be infested with Apaches, who were wont to conceal themselves in a cañon some ten miles in length, where they attacked small parties. Every man, therefore, took the precaution to be well armed. We did not get away until three o'clock in the afternoon, when a ride of six miles to the south-west brought us to *San Lazaro*, a large ruined hacienda, on the banks of the Santa Cruz River, where an extensive soap manufactory was formerly carried on. The buildings were beautifully situated in the valley, amid a grove of large cotton-woods, with an extensive orchard of peach and quince trees; but the fruit had all been gathered by parties who had passed before us, or by the Indians. I walked through the tenantless chambers of the hacienda, which seemed to have been built with a view to comfort and convenience unusual in the country. It had been deserted for six years; and in this short period, the rain had washed away some of its walls, and portions of the roof had fallen in. An adobe building will last many years with care; but it must be closely watched during the rainy season: for when once the water has found its way through a wall, it very soon makes for itself a wider passage; next the timber in the roof gives way; and in a short time, the whole building becomes a ruin. The stream here takes a short turn towards the north, passing through Tubac and Tucson; soon after which it loses itself in the desert, without reaching the Gila. Since leaving Santa Cruz, our course had been along the banks of this stream, in many places thickly overgrown with willows and cotton-woods, and hemmed in on both sides with mountains. Many deserted and ruined ranchos were seen in the valley, for it had not a single inhabitant beyond the walls of Santa Cruz. Rode about six miles further south and encamped.

September 30th. Eight miles from camp, brought us to *Cocospera*,* an old mission at the head of the San Miguel River, which was abandoned about six years before in consequence of the inroads of the Apaches. Here, rising from a spur of the plateau, and overlooking the valley, stands a church, a building which presents quite an imposing appearance, with its towers and dome still in a good state of preservation. It is surrounded by houses or stalls with fronts open towards the church, which were probably occupied by those who came from a distance to worship; or they may have been intended for the Indians, many of whom were formerly connected with all these frontier missions, and employed as laborers upon the lands belonging to them. The interior of this church must have been very beautiful in its time, when its numerous niches were filled with statues, and its walls covered with paintings. The gilded and painted ornaments upon the walls and ceiling still remained, consisting of crucifixes, doves, and other sacred emblems, surrounded by inscriptions, scrolls, and flowers, which displayed more taste than we had before seen in such buildings. Several wooden figures still stood about the altar; but the pictures were all gone. Bats were already in full possession of the edifice, and hung from the projecting walls and corners, like so many black ornaments; while the swallows which were flitting about us had also taken up their abode here, and added their mud-built nests to its interior decorations. This was one of the richest missions in Sonora; and its property in cattle was so extensive, that (as we were afterwards told) the increase of a single year amounted to ten thousand head. In the valley below and immediately adjoining the building, stood the orchard; well stocked with apples, pomegranates, peaches, and quinces. These last we found in the greatest profusion, the trees still bending with their loads of fruit. There are two varieties of the quince here, one hard and tart like our own, the other sweet and eatable in its raw state, yet preserving the rich flavor of the former. The Mexicans gathered and ate them like apples; but I found them still too hard for my digestive organs. We gathered a few, which we afterwards stewed; they were then very palatable, and in a measure supplied the place of vegetables. The valley here is more than half a mile wide, and seems once to have been well cultivated.

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* This place has since become somewhat notorious from its having been colonized anew by the party of Frenchmen from California, who subsequently attempted to set up a government of their own, and for a while gave the authorities much trouble.

Proceeding down the valley, we noticed many ruined ranchos, corrals, and other remains of a civilized community, now overgrown with tall grass and shrubbery. Cotton-wood trees and sycamores of a large size grew along the margin of the stream, and at intervals were found in groups. The grass every where was rich and abundant. It was really sad to see so beautiful a region reverting to the condition of a wilderness in consequence of the attacks of ruthless marauders. We now approached the dreaded cañon, where our fair captive, Inez Gonzales, had been taken and her companions murdered, one year and seven days before. Our Mexican companions had been talking of it all the morning; and as we drew nearer and were about to enter the defile, they huddled more closely together, each fearful of taking the lead, or of being ten feet from the rest. They were going to the same fair as before; and it was believed that the Apaches, knowing of the large numbers that annually collected at Magdalena, were on the watch for their victims in all the mountain passes, where they could lie in ambush and throw their lances or arrows at the passing traveller. We soon came to a spot where, in a dense thicket of forest and shrubbery, our attention was directed to a rude cross. Here was the fatal spot where, on the occasion above referred to, the savages rushed from their ambuscade, shooting several of the Mexicans with their muskets, and piercing others with their long lances, before they could recover themselves and act on the defensive. Within twenty feet of the path ran the stream, whose mysterious murmuring beneath the dense foliage seemed a fit appendage to such a deed of blood. The mountains here on either side of the defile approached within a hundred feet of the path; though in some places they are much nearer, and rise from five to eight hundred feet, either abruptly or with steep-sloping banks.

We saw here, for the first time, the giant Cereus (*Cereus giganteus*), or *petahaya*, of the Mexicans. This monster of the cactus family assumes various forms; sometimes rising in a single fluted column to the height of thirty or forty feet; sometimes, at eight or ten feet from the ground, it divides into two or more branches, which turn upwards like the prongs of an inverted fork; others again throw off four or more arms, disposed with great symmetry, and having the appearance of gigantic candelabra. These covered the rocks on both sides for miles; and among them grew numerous humbler species of the same family, some loaded with rich red fruit, and others trailing their snaky branches over the ground, altogether forming a striking and peculiar vegetation, unlike any thing we had before seen.

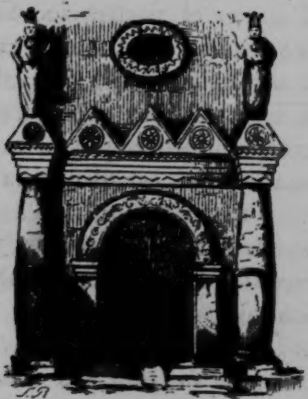
After winding our way about ten miles through this defile, we again emerged into a plain or broad valley, through which still coursed the beautiful little stream which we first met at Cocospera; though by what name to call it, I hardly know. Like many of the largest streams which wind among the mountains and across the plains of Mexico, this bears several names, according to the towns which stand upon its bank. Cocospera, Imuriz, San Ignacio, and San Miguel, have been applied to it in turn; and I cannot find, from the maps which I have consulted, that it bears any general name. It forms the western branch of the Sonora River, one of the principal streams in the State.

When we again found ourselves in the open country and beyond the dreaded cañon, our Mexican friends showed themselves less desirous of keeping as close to us as they had done. Soon after they told us they wished to reach Imuriz before night, when we took leave of them; and having already come thirty miles, we thought best to stop near the little town of *Babasaqui*. Our general course during the day had been south south-west. We passed many deserted ranchos with fine orchards near them; but not a living being had been seen until we reached this settlement. In the orchards we found more fruit than we had seen before—from the fact, probably, that there were but few travellers this way, and people did not dare venture so far from their homes for the luxury. We gathered a supply of delicious peaches, with which we filled our haversacks and pockets. Many wild cattle were seen to-day, some of which crossed our path quite near us. A bull gave chase to Mr. Thurber, and pursued him until he regained our camp.

After the tents were pitched, we strolled up to the village, where we found an uncle of Inez. He had not before heard of the restoration of his niece, and expressed a thousand thanks to us all. In the evening, he, with several others, came to our camp, bringing milk, cheese, tortillas, and peaches, which they begged us to accept. It was all they had to give except their thanks, and they seemed much pleased at our accepting them. The people here seemed very quiet and well disposed, with well cultivated fields, which showed that they devoted a portion of their time, at least, to labor. A man living here who had a contract to furnish the government with five hundred head of cattle, told us that so abundant were they in this valley and the adjacent plains, that he had not yet begun to collect them, although all were to be delivered on the 10th of October. His mode of catching them was that before alluded to, viz., to lasso them by the head or horns, then fasten them to the heads of domesticated cattle, and drive them to a corral or pen. During the night, we heard the bellowing of the wild bulls quite near us, and felt some apprehension that they might make a charge upon us, and stampede our mules, if they did no other mischief.

October 1st. A south-easterly course of three miles brought us to *Imuriz*, a miserable looking village. There was an improvement which I noticed in the adobe houses here; they were all capped with brick or tiles, which gave them an air of finish and durability above those that are simply capped with mud. Here we rounded a mountain, and then followed a valley in the same direction. Every thing now around us indicated an approach to a civilized, or rather, I should say, a settled country. Ranchos with cultivated grounds, fields of wheat and corn, orchards teeming with peaches and pomegranates, met us with every expansion of the valley. The contracted foot-path, or mule trail, however, still showed that we had not yet reached the country of wheeled vehicles, all the transportation being carried on by means of pack-mules. We met many people to-day passing from one village or rancho to another; and not a little curiosity was manifested at seeing such a group of white faces with long beards wending our way among them.

Riding up to the church, which appeared quite new, we dismounted and hitched our animals, to take a brief inspection of it. Like the other buildings of the country, it was constructed of adobe, but had neither steeple nor tower. Three bells were suspended from a frame in front, on one of which, I noticed the date 1680. There was nothing of interest here; so we journeyed on to *Terrenati*, a village of three or four hundred souls, two miles distant. Continuing our ride six or eight miles further still, and following the same stream that we first met at Cocopera, we reached *San Ignacio*. We rode into the plaza facing the church, and, dismounting, applied at an adjoining house for admission into the sacred edifice.



Door-way of the Church, San Ignacio.

We were received with much politeness, and conducted by a young woman through an entrance near the altar into the church, which did not meet my expectations, as it was by no means in keeping with the exterior of the building. There were but few pictures on the walls; and the statues, which are of wood, and from two to four feet high, were quite ordinary. Among the latter, I noticed two Chinese figures, intended doubtless for mandarins, but here metamorphosed into saints. These images reminded me at once of our proximity to the Pacific, with its opposite shore formed by the Celestial Empire, between which and Mexico, there was formerly a flourishing commerce. I asked the attendant if those figures were not from China; to which I received the usual and unsatisfactory reply of "*Quien sabe?*" I suppose she knew as little of China as of the topography of the moon; and as to the personages they originally represented, it was a matter of perfect indifference to her and the people who worshipped there. The church is built entirely of brick, being the first edifice of that material we had seen. It has two towers, and is on the whole a picturesque looking structure. This was one of the earliest missions established in Sonora, and was founded about the year 1687. Though the mission has been abandoned for many years, the results of Jesuit industry are still apparent in the shape of some pomegranate orchards.

We had heard much of the superiority of the pomegranates of this place, for they are famed in all the region round about; and for once in this country we met with something that really came up to our expectations. They were delicious beyond comparison. Some specimens measured sixteen inches in circumference, and they were sold at from one to two dozen the real (twelve and a half cents). Immediately over the wall where we stood, was a large orchard with long lines of these trees bending under their luscious burden; the deep brilliant green of their foliage presenting a striking contrast with the bright yellow of the fruit. Great quantities are used in the distillation of a strong and fiery species of aguardiente. The man through whose house we entered the church was quite polite to us, and invited us to drink of this liquor, and to help ourselves from heaps of the fruit and of peaches likewise.

The place is quite neat for a Mexican town, and we left it with a very favorable impression, which however was somewhat weakened ere long. After we had proceeded a mile upon the road, I received an invitation from the Alcalde to return. Expecting some civilities from the head man of the place, I somewhat reluctantly obeyed; for I was desirous to reach Magdalena before nightfall, and would willingly have dispensed with these hospitalities. I found, however, that his object was to ascertain who we were, and to see our passports. I informed him who I was, and added that by virtue of my office, I claimed a right to go any where in pursuance of objects connected with my duties. The gentlemen with me, I told him, were attached to the Commission; and if he desired to be satisfied of the truth of my statement, he must send to Magdalena, whither we were going; as my papers were now with my baggage on the pack-mules several miles in advance. The little, fat, puffy official, was not at all satisfied; he seemed to distrust my statement, and wished us to go before the Prefect, to which I decidedly objected. I again politely told him that I should be in Magdalena a couple of days, and would there satisfy his doubts. Continuing our journey, a ride of six miles through a richly cultivated valley brought us to *La Magdalena*, or rather within half a mile of it, where we encamped. I did not wish to go nearer the town, on account of the large number of people that would be assembled there.

October 2d. Before I was out of my bed, (and I rose before the sun,) a messenger came to my tent and asked for the "Commandante." I heard him making inquiry of the cook, and, springing from my cot, went to the tent-door and asked his business. He said the Alcalde desired to see me as soon as possible. I told him I did not make calls at that hour, but would see him after breakfast. Accordingly, about nine o'clock, I waited upon that dignitary, accompanied by Dr. Webb, Mr. Cremony, and Mr. Thurber. He proved to be a shop-keeper of the third class, occupying a filthy little place, with a stock in trade, I should think, worth some twenty-five dollars. I told him that agreeably to his orders I had called upon him, and desired to know his commands. He presented me a letter which he had just received from the Prefect of San Ignacio. It stated that a party of Americans had passed through that place, who, on being called upon to show their passports, had said they would do so at La Magdalena. That he wished us to be examined and detained until he came, which would be to-day. Mr. Cremony then introduced me as the Commissioner of the United States, explaining my duties and those of the gentlemen attached to my party. I first stated to him briefly the object of my visit to La Magdalena, viz., to purchase provisions and mules for our surveying parties at the Gila; and then showed him my commission, with the great seal of the United States and the bold signature of Zachary Taylor affixed to it, together with letters from General Condé and Carrasco, requesting the civil and military authorities to extend to me every aid in their power. Whether it was the name of the hero of Buena Vista or the number and character of my letters that produced the effect, I do not know; but he expressed himself perfectly satisfied before I had got half through, and said that he was only acting by order of the Prefect of San Ignacio. I told him that the Prefect had not treated us well; that I had stopped in the public square with my party, and had been for more than an hour in the church, or in the dwelling house of one of the citizens, when a hundred of the people were around us, and knew our history; that instead of asking me then, he had permitted me to resume my journey, and after getting a mile from the town, had ordered us back. After many apologies, the Alcalde told us to go where we pleased, and very politely tendered his services.

I did not really blame the authorities alluded to except for compelling us to retrace our steps. The quiet people here have been so much annoyed by the conduct of California emigrants who have passed through the country, as to make them shy of all Americans. These reckless adventurers often set at defiance all law and propriety, and we had many accounts of their shameful and brutal conduct. The fields in this country are seldom fenced, and it is no uncommon thing for a party of these men to encamp and turn their animals into a field of corn, on which the help-less ranchero and his family are probably depending for their chief support. They will enter a house, pistol in hand, demanding whatever it affords; frequently they help themselves, without the ceremony of paying for what they take; and commit other outrages which make one who has any national pride blush to hear recited.

This affair being ended, we walked around the plaza, or public square, where crowds of people were busily occupied in setting up their booths for the approaching *fiesta* of San Francisco. These were chiefly constructed with boughs of trees lashed together, and covered with the same. A few had begun to display their wares. We next went into the church.

Although San Franciscos are as common in Mexico, as Washingtons, Jeffersons, and Franklins are with us, and churches dedicated to that saint are to be found all over the country; yet this of La Magdalena is the most celebrated and potent of all, inasmuch as it contains a celebrated figure of San Francisco, which, among other miracles, performed that of selecting the place of its abode. A party of San Franciscans, as the legend goes, were travelling in search of a proper spot to found an establishment, and had among their other effects this sainted figure packed upon a mule. On arriving at this place, the animal carrying the precious burden became obstinate, and refused to budge. This the worthy fathers interpreted as indicating the Saint's pleasure to stop here. So here they built the church. The original building, with the exception of the tower, is in ruins; but a new one has been erected within a few years, which is quite an imposing edifice, with two fine towers and a large dome, beneath which the Saint reposes.

For several days previous to the 4th of October, which is the Saint's day, preparations for its celebration begin; so that the devotions and offerings, with their accompanying festivities, are in full blast a day or two in advance. La Magdalena and the Church of San Francisco are the Mecca of devout Mexican Catholics. From the borders of Sinaloa on the south to the furthest outpost near the Gila, and from the Gulf of California to the Sierra Madre, they flock in by thousands, to offer their devotions at this shrine. It is not unusual for very great sinners to bring their burden of guilt a distance of four or five hundred miles; a journey in this country of greater difficulty, and requiring more time, than one from New Orleans to Quebec. The poorer classes often come a hundred miles on foot, begging by the way. The more penitent, like the idolaters before the temple of Juggernaut, or the devout Mohammedan at the shrine of his prophet, prostrate themselves, and, with their hands crossed on their breasts, advance on their knees a hundred feet or more to the church. Both men and women are thus seen toiling over the dusty street and brick pavement of the church to the presence of the Saint, who is laid out beneath the dome and in front of the altar. When the votaries reach the bier, they cross themselves, and with outstretched arms repeat their prayers. They then rise to their feet, and, drawing nearer, present their offerings.

The body of San Francisco, or rather its image, lies upon a platform or bier clothed in rich vestments, and covered with a piece of satin damask of the most gorgeous colors. The head, hands, and feet are alone exposed. These are made of wood, colored to represent flesh; and I was informed by a Mexican gentleman, that these constituted the whole statue. The body, he told me, was merely a frame-work, stuffed with rags and cloths to give it a form, over which the drapery was disposed. The offerings consist of money and candles; and as wax is quite expensive here, the poorer class present candles of tallow. There was a continual jingling of money; in fact, so constant was the dropping of silver dollars into the receptacle placed for them, that no other sound was heard. What was singular in all this mummery was, that no priest was present. The men who took the money were ordinarily dressed, having on nothing to distinguish them from the crowd around. There may have been a priest behind the altar or somewhere not visible to the devotees; but while I stood by the side of the image and witnessed the proceedings on two occasions, I could perceive none. An estimate may be formed of the crowds here present, when I state that the receipts this year, although the attendance was less than usual, were about twelve thousand dollars; while on some former occasions, the amount of money voluntarily given had reached the sum of eighteen thousand. To the question what become of all this money, I received the usual reply of "*Quien sabe?*" A gentleman, however, told me that it went to the city of Mexico, and that neither the poor of Magdalena nor the church there derived any benefit from it.

In the evening I visited the church again, when I witnessed the ceremony of consecrating ribbons. The space around the image was crowded as in the morning with devotees, each provided with a piece of ribbon. The mode of consecrating it depended upon the ailment of the applicant. If he or she had a pain in the head, the ribbon was passed several times across the forehead of the figure by the officiating Franciscans. If blind, the ribbon was passed across the eyes; if lame, or afflicted with rheumatism, it was passed over the arms or legs; and in many instances I saw it drawn between the toes of the Saint. Had some of our turtle-fed aldermen been the applicants for the latter process, one might have believed it to be for the gout; but I fancy that a diet of frijoles and tortillas does not often engender that disease in Mexico. Some of the worshippers were provided with long pieces of ribbon, which they applied in turn to every part, a knot being tied after each application, making, probably, as one of the gentlemen observed, "a sort of family medicine chest." The faith of the people in this thing of wood and paint is astonishing. An old man told us with the utmost seriousness, that last May, when the cholera visited the place, and was cutting off twenty a day, they had only to bring the image into the street, and the disease at once disappeared. He was asked what he would have thought if the disease continued. He replied, "That it was the will of the Saint, and we must submit."

In our rambles, we dropped into an attractive-looking shop to make inquiries about such provisions as we required. The proprietor, Señor Gonzales, was a native Castilian, which we soon perceived by the purity of his language. He at once recognized us as Americans; and after answering our inquiries, invited us into an inner apartment, furnished very handsomely, and in good taste. One of the first things I noticed here was an American rocking chair—an article of luxury better adapted, one would suppose, to the quiet habits of the Mexicans, with their fondness for a siesta during the heat of the day, than to those of restless Yankees. Wine and other refreshments were offered us; and an hour was agreeably spent in conversation with our new acquaintance. He gave us much information about the country, and the ceremonies we had just witnessed. While there, several strangers, also gentlemen of education and respectability, came in; and finding who we were, and of what we were in pursuit, they gave us such information as we required, and tendered us their services. I regretted to learn that we could not procure the provisions we needed; but it was expected that the fair would bring many mules into market, so that in a few days we could obtain all that we wanted.

In the evening we walked about the town, and among the booths, which were arranged on every side of the plaza, and along the principal streets. They seemed much like those which it was customary to erect in New-York on the Fourth of July. Cakes of various kinds, tortillas, fruits, and aguardiente, were the staple articles; but while there were booths entirely appropriated to the sale of this intoxicating liquor, I do not remember to have seen a single drunken man. In the midst of these booths was a large inclosure, covered with the boughs of trees, beneath which some hundreds were assembled, and engaged in dancing. An enormous bass drum, which was heard above all other sounds, a couple of violins, and a clarionet, ground out waltzes and polkas, while the beaux were swinging round the señoritas in a manner that would astonish our dancing community. Notwithstanding the crowd here assembled, most of whom were strangers to each other, the most perfect order was kept. The Mexican people are ardently devoted to dancing; and when they once enter into it, they do not cease until the sun appears the following day. Some of our party who were given to this amusement thought they would like to take a few turns. So, casting a glance along the line of dark-eyed damsels who occupied the benches, and selecting the most attractive, they advanced without any introduction, led them into the arena, and at once joined in the merry whirl. A perpetual fandango was thus kept up day and night; where people of all sorts, sizes, and conditions might be seen twirling to the slow measure of the Spanish reel, or the more active waltz and polka. But gambling, after all, seemed to predominate. Whole ranges of booths were devoted to this exciting amusement; and crowds of every age, sex, and class were assembled about them. Boys and girls of six and eight years of age laid down their coppers, and men their reals and dollars; while at other tables the more wealthy and aristocratic ventured their ounces. Some of the tables were attended by women, selected, not on account of their personal beauty, but for their expertness in shuffling the cards.

October 3d. Accompanied Mr. Pratt to the hills opposite our camp, to take some sketches. The hills were separated from the camp by the river, on the banks of which were some hundreds of men and women bathing or washing. A few cotton-wood trees grew along the valley; and the margin of the stream was lined with willow-bushes. The hills here are about five hundred feet high; and from them we had a fine view of the town and adjacent plain, which was inclosed towards the south by a high range of mountains. The hill where we stood was literally covered with cacti of every variety that we had seen, from tiny plants not longer than one's thumb, just projecting from some crevice, to the giant cereus, that shot up to the height of fifty feet. The agave, yucca, fouquiera, Spanish bayonet, mezquit, and other plants, alike grew in profusion around us.

In the evening we again visited the church, where the same scenes were going on as before described. It was now brilliantly illuminated, and a procession was marching through the crowd, each individual in it holding a lighted candle in his hand. The music was performed by a circus band, from Hermosillo, which played the same pieces for the interludes of the service as it did for the performances of evening. Some of our popular Ethiopian melodies occasionally greeted the ear.

October 4th. Finding it impossible to obtain provisions here, I determined to go to Ures, the Capital of the State of Sonora, about ninety miles distant, for the purpose of procuring what we needed, and of negotiating my drafts on the government, which I could

MAGDALENA, SONORA.—p 408. vol. i.

not do here. Señor Gonzales agreed to furnish the mules I wanted, but could not do so under a week or ten days. I accordingly gave him an order to procure for me ten pack and four riding mules, sundry pack-saddles, etc., which were to be delivered me on my return from Ures.

In the afternoon, services were performed over the figure of San Francisco, preparatory to its being carried through the streets in grand procession. As soon as the sun had set, the eight bells commenced a merry peal, the church was illuminated, and the procession formed. The figure was brought forth on a platform, or bier, over which was a canopy of crimson satin; and two lines were formed extending across the plaza, each individual bearing a lighted wax-candle in his hand. I estimated the number in the procession carrying these candles at twelve hundred. A band of music led the way, followed by boys and men swinging censers of incense. Next came the Saint immediately preceded by a priest; and a crowd of women carrying lighted candles followed, constituting the main body of the procession. Innumerable small rockets were thrown up by the populace, which flew about in all directions, and fell among the crowd. Muskets too were fired by such as had them from the streets and the house-tops, as the procession passed along. On the whole, the noise and confusion reminded us of the celebration of the 4th of July, and seemed to exhibit quite as little devotional feeling as that day brings forth among us. It was one continual scene of amusement and hilarity from the begining to the end. After marching across the plaza and through one of the streets, the whole distance not exceeding a quarter of a mile, the image was carried back to the church and laid on the shelf until the next year; and so the grand fiesta ended.

We dined to-day with our Castilian friend, Señor Gonzales; and at his house we met several Mexican gentlemen, among them Don Ilarion Garcia, whom we saw at our camp on the San Pedro.

La Magdalena is the best built town we had yet seen; the houses are chiefly of adobe, though some are of brick, and nearly all are stuccoed and whitewashed. Many are colored yellow and otherwise ornamented, in a manner exhibiting considerable taste. The permanent population does not exceed fifteen hundred souls, which number, during the days of the festival of San Francisco, is swelled to ten or twelve thousand.

CHAPTER XIX.

ILLNESS AND DETENTION AT URES.

Leave La Magdalena—Taken ill—Diary breaks of—Sufferings on the road—Reach Ures—Poor quarters—Dr. Webb and rest of party visit Guaymas—Kindness of Dr. Campbell—Description of Ures, the capital of Sonora—Theatricals—The Yaqui Indians—The Opate Indians—Visit from Tanori, an Opate chief—Other Indian tribes of Sonora—Exports—Narrative of an expedition against the Apaches—My party leave me and go to the Gila—Taken to Dr. Campbell's—Irruption of the Apaches—Imbecility of the Mexicans—Tanori and the Opate Indians go in pursuit—Visit from the Coco-Maricopa Indians of the Gila—Good news from Tanori—He defeats the Apaches and recovers the stock—Entrance of the victors with the recovered booty into Ures—Death of General Garcia Condé—His character—An American held in bondage—Arrival of General Flores—Departure for the coast.

October 6*th.* We left La Magdalena in the afternoon, taking a south-easterly course across a plain covered with grass and mezquit bushes. There was no wagon road, wheeled vehicles not yet being used. We followed a large and well beaten road, which, though traversed by thousands of animals and pedestrians, was in many places, where it wound over the hills, no more than a narrow path twelve or eighteen inches in width. Crowds of people returning to their homes lined the road; so that we had no lack of company. We are still in a country infested by bands of Apaches, who prowl among the mountains and pounce upon any small and unprotected party that may fall in their way. We journeyed but twelve miles when we encamped.

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With the above, my diary breaks off. The following day, I felt quite ill, and when we encamped, early in the afternoon, was unable to record what had passed or to make any notices of the country. The day after, my illness continued, and my appetite left me entirely. I still kept in my saddle, and, by stopping every hour or so and lying down, was enabled to reach a camping place early in the day. Ranchos and villages being at short distances apart, we found no difficulty in halting where it suited our convenience. On the sixth day after leaving Magdalena we reached *Ures*, passing through the villages of *Cucurpe*, *Tuape*, *Opodepe*, and *Rayon*, a distance of forty leagues. It was a most painful journey to me. I was obliged to keep on horseback, there being no other means of conveyance. During the day, between the hours of ten and four, the sun was intensely hot, and the rays from the light colored soil gave me a severe pain in my head. I used an umbrella when the wind did not blow, which gave me some relief; nevertheless, I was compelled to make frequent stops, and avail myself of a bushy tree or shrub that afforded a shade, where I could lie down and rest. I would willingly have stopped; but the miserable little places we passed afforded no comforts, and my companions agreed with me that it was best to push on for Ures. As the nights were cold, requiring two or three blankets, it was necessary that I should go into quarters and keep as quiet as possible. Two of the party therefore rode on in advance, taking with them my letters to Governor Aguilar. We reached the borders of the town before they rejoined us; and I was glad to throw myself on a tent cloth in the shade of a mezquit tree, and there await the return of my friends. Soon after they came, but had only succeeded after much search in obtaining a room in the rear of an unoccupied shop, of which I at once took possession. The walls were of uncolored adobe, and the floor of brick, while the light was admitted from a small barred window resembling that of a prison, which opened into a court yard. My furniture consisted of my portable cot, a leather pannier which contained a small portion of my clothes, and a camp stool. The morning after I arrived, the Governor, Don José de Aguilar, called on me and kindly offered his services; but I was too ill to say much, or even listen with attention. An American physician, Doctor Campbell, who had long resided in the place and had been a resident of the State for some twenty-five years, hearing of my arrival, came at once to see me; and from what he said, I found that my illness was a serious one, and that I should not be able to leave for a long time. Doctor Webb remained with me; and my servant, a faithful Irishman named William Turner, also occupied a corner of the room. After being here about two weeks, I was carried to other and somewhat more comfortable quarters.

My new room was about twenty-five feet square, with a brick floor and colored walls; and as is generally the case with the smaller apartments in large houses, there was no window, the light being admitted from the door. But the greatest deprivation was the want of a fire-place, of which I afterwards learned there was but one in the whole town, and that was in the house of Doctor Campbell. This gentleman sent me a table and a couple of chairs; so that in the matter of furniture I now considered myself well off.

About this time, finding my fever was of such a nature that it would be weeks, if not months, before I should be able to resume my journey, I thought it best to send Doctor Webb, Mr. Thurber, and Mr. Cremony to Guaymas, on the Gulf of California, for the purpose of negotiating my drafts, to enable me to pay for the provisions and mules I had purchased. They accordingly left for that place, Mr. Pratt and his son remaining and occupying an apartment next to mine.

Doctor Campbell, to whom I shall ever feel under the deepest obligation for his kindness and constant attention, visited me daily, and often called two or three times during the twenty-four hours. I had occasional visits too from Dr. Wallace, an English physician who had formerly been in practice at Ures, but had lately abandoned the profession, and was then engaged in working a silver mine, about twenty miles off. There was also a German physician, Dr. ———, of Hermosillo, who made me several calls; so that on the whole, although my comforts were few, I was well provided with medical attendance. I felt the want of a fire the most, for I never slept with less than four heavy blankets over me. These, it is true, kept me comfortable at night; but during the day, in the months of November and December, when I wished to sit up, I felt much inconvenience from the cold. The lowest point at which I noticed the thermometer was 40° Fahrenheit; which for a sick man, with no fire, and the door open to admit light, cannot be said to be comfortable. Nevertheless, thanks to an all-protecting Providence, and the excellent attendance I enjoyed, the privations I was subject to did not prevent my recovery; and by the middle of December, I was able, with the assistance of my friends, to walk out.

Dr. Webb and his party reached Guaymas in safety; but there he was taken ill with a fever, which detained him two weeks beyond the time allotted for his journey. The others also had slight attacks. On their return, I was still very weak, though convalescent. Dr. Campbell, who had had much experience in the fevers of the country, said it would not be possible for me in my enfeebled state to make the long journey to the Gila, where our surveying parties were, and thence to California. Both he and Doctor Webb advised that I should remain in Ures until my strength was sufficiently restored to enable me to proceed to Guaymas, and should then embark in some sailing vessel for Mazatlan, from which place I could take passage for San Diego, in California, where the engineering parties would meet me. As soon as I determined on this step, I considered it best that the party which had accompanied me should retrace their steps to Santa Cruz, and from that place rejoin the parties on the Gila.

On the fifteenth of December, the party took leave of me and set off, accompanied by eight Mexicans, whom Governor Cubillas had kindly provided to escort them as far as Santa Cruz; there they hoped to find

General Condé or some of the Mexican Commission, from whom a further escort could be procured to the Gila. Our journey to Ures through the unfrequented parts of the State, although unattended by any attacks from the Indians, had not been without danger; and as it was known that bands of Apaches were prowling about, and had committed many depredations in the vicinity of the town, the authorities did not think it safe for our small party to return without protection.

Being now left alone with my faithful attendant, William Turner, who did duty in the triple capacity of servant, nurse, and cook, my excellent friend, Dr. Campbell, insisted on my taking up my quarters in his house, where I should be better provided for, and where he could more easily attend upon me. On the sixteenth of December, I removed to the Doctor's, where, among other things, I had the luxury of sitting by a fire, and of receiving many attentions from his kind and amiable lady, such as can be appreciated only by those, who, having a family and a home, are taken sick among strangers in a foreign land. Dr. James W. Campbell is a native of Virginia. His father was connected with Lewis and Clarke, the pioneers in the exploration of the Rocky Mountains, and was an agent of the United States in some negotiations with the Indian tribes west of the Mississippi. This led his son, the Doctor, to New Mexico, and thence to Chihuahua and Sonora. He married in the latter State, and entered into the practice of medicine, for which he had been educated. Every American who comes to the place where the Doctor resides, is certain to find in him a sincere friend.

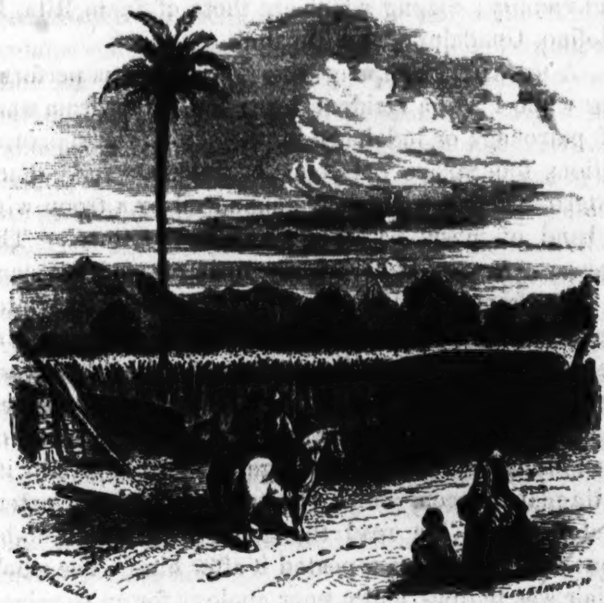
URES (pronounced *Oo-ress*) was originally a missionary establishment, and among the earliest in the State. Not many years before the expulsion of the Jesuits, they commenced here the erection of one of the largest churches in the country; and when that event took place, the walls had been raised about half their intended height. The thirty years' neglect, however, which it has suffered since that time, has reduced it to a mass of crumbling ruins. Adjoining it are the remains of a smaller edifice, which is now being rebuilt. A prison, or house of correction, a plain adobe structure, is as yet the only public building in the place. About a mile from the town an *Alameda*, or public park, has lately been laid out and planted with trees; but so primitive is its appearance, that one would hardly recognise it as any thing more than an ordinary field and garden.

During my residence here, Governor Aguilar resigned his office, and his successor, Don Francisco Cubillas, was installed into his place. Like his predecessor, Governor Cubillas is an accomplished gentleman. He has spent many years in Europe and the United States, has a highly cultivated mind, and speaks the English language with fluency. He manifested much interest in the objects of our commission, particularly in the scientific investigations, which I told him we were making. During my illness, he extended to me many attentions, for which I shall ever hold him in kind remembrance. To get my party off, and support myself, while at Ures, of course required considerable money. This he kindly proffered to me to any amount, although I could see no way of repaying him under many months.

The Legislative Hall is a plain adobe building, distinguished from others only by a flag-staff. The Assembly consists of but eight members; and one would suppose that so small a body would be remarkable for the harmony of its proceedings. Yet I was told that a large portion of its last session was spent in disputes about the qualifications of three of its members, and that it had adjourned without transacting any public business. A newspaper called the Sonoriense, the only one in the State of Sonora, is issued here weekly, and is chiefly devoted to the publication of laws, the proceedings of the State Legislature and general Congress of Mexico, and other matters of an official character.

The town is regularly laid out in squares, a large church and accompanying plaza occupying the centre. The church is a plain, substantial edifice, with a tower and dome, corresponding in general appearance with others throughout the country. The houses are well built and in general spacious, better, in fact, than any we had seen, except a few at La Magdalena. Although but of one story, they are about eighteen feet in the clear. As brick is used for cornices and other exterior ornaments, and as many of the houses are plastered and colored, the town has a pleasant appearance. Its streets, too, unlike most Mexican towns, are quite clean.

Hard by runs the Sonora River, the bottom land of which, extending for more than a mile on either side, is exceedingly fertile. Its use, however, is almost wholly confined to the production of corn, wheat, beans, pumpkins, and chili. Vegetables, which one would expect to form a large part of the subsistence of the people, are scarcely cultivated here, and during my residence of three months I saw none. Oranges, lemons, quinces, pomegranates, and peaches, abound. There is, too, a solitary date-tree within the limits of the town; but I could hear of no others near, and presume this to be an exotic. The sugar cane grows remarkably well in the bottom lands, and is cultivated in sufficient quantities to supply a small sugar mill. Nothing, however, is made but the common *pilonce*, an article inferior to the most ordinary brown sugar of commerce. Cotton of a superior quality, I was told, is raised here, though not to any extent.



Date Tree, Ures.

The plain on which the town stands is intersected with many *arroyos*, or dry water-courses, which, after heavy rains, become filled, inundate the country, and endanger the town. Several extensive haciendas are situated in the vicinity; among which are those of Santa Rita, El Molino, Guadalupe, and Tapahui.

A theatrical company from Mazatlan was performing while I was a resident here; but, either from want of patronage or indolence in the actors, the representations took place only once or twice a week. Each entertainment was publicly announced by a troop with a band of music parading through the town. The theatre was a court yard in the open air, and the stage a rude frame work filled with earth; the spectator being at liberty to look before or behind the scenes, as best suited his taste. Seats were not furnished, each person bringing his own, or standing during the performance. The prompter was ensconced in a sort of well in the front part of the stage, his head covered with a tin-plate screen, which strongly resembled a patent Dutch oven. He read the entire play in an under tone, and the actors repeated it after him. The whole affair was tedious, and a poor apology for an evening's entertainment.

The laborers of Ures and of other towns in the central and lower parts of Sonora are the Yaqui Indians. They fill the same place and perform the same duties as the lower class of Irish do in the United States. I was told that they are invariably honest, faithful, and industrious, traits of character which cannot be said to belong to the lower order of Mexicans. I saw these men at work in a broiling sun, with no garment save a bit of cloth around their loins, and a straw hat upon their heads, making the adobes or sun-baked brick, and laying them in the walls. Others were laboring in the fields; and, in fact, the hard work whatever it was, seemed to be performed by these men. They are also the fishermen and the famous pearl divers of the Gulf of California. These Indians were in the early history of the country extremely warlike; but on being converted to Christianity, their savage nature was completely subdued, and they became the most docile and tractable of people. In the civil wars of the State, some thirty years since, they took part with one of the factions; and when this strife had passed away, it was not easy to subdue again the dormant propensities for war which had thus been aroused. They are now very populous in the southern part of Sonora.

The Yaquis were among the first to be converted by the Jesuits; who used them as it is said the Egyptians did the Israelites, making them perform all the manual labor of the missions. They became excellent mechanics, and built the churches and missionary establishments of the country, as well as the *presidios* or garrisons. In addition to the tithes, they were also made to pay tribute, either in labor or the products of the soil. When their old masters were banished the country, "the name of Jesuit was converted into that of cura, and slavery was by the same ingenious artifice changed to servitude. Priests, who from bad characters were suffered to reside no where else, obtained their living from a Yaqui congregation; and it was as common in Mexico to banish a friar to a Yaqui ecclesiastical establishment, as any other culprit to the frontier presidios."

Being desirous to obtain a portrait characteristic of this large and once powerful tribe, I made my wish known to Governor Cubillas, who sent a man to me for the purpose. He had a mild expression of countenance and was considered a good specimen. Mr. Pratt obtained an excellent likeness of him; though the fellow became so alarmed at seeing himself transferred to canvas, that he would not return to have it completed. On expressing my desire to possess a full vocabulary of their language, I was told that Padre Encinas, the learned and venerable priest attached to the church here, was so familiar with it, as to be able to write and preach in it. I accordingly called on him with a friend; when he readily complied with my request, and furnished the corresponding Yaqui for the two hundred words in my vocabulary.

Another large tribe of Indians in this State is that known as the Opate. They are found in the central parts of the State, and are chiefly devoted to agriculture. They live in villages, and are in general a quiet and well disposed people. Between La Magdalena and Ures we passed several villages of Opates, who in dress and appearance were quite as respectable as their Mexican compatriots. These people, however, are most noted for their bravery, being the only ones who have successfully contended with the savage Apaches. On many occasions they have been called out under their leader *Tanori*, who receives regular pay from the government, and always holds himself in readiness when he knows the common enemy is among them.

Ever since the conquest of the country, the Opate tribe has manifested a frank and docile character, sympathizing in all things with the whites. They early became converts to Christianity, and have ever remained faithful to their religion. Of their attachment to law, order, and peace, they have given the most unequivocal proofs.

Three companies of infantry formed from them, were stationed at the frontier towns of Bacuachi, Tubac, and Babispe; and there, it is said, for a series of years, they performed many acts of extraordinary valor, one of them having often been known to contend successfully against eight or ten Apaches. In the civil wars of the State, they also took conspicuous part. Their sense of propriety is manifested in always being well clothed with a clean white shirt and pantaloons, while their Yaqui brethren prefer going naked, or nearly so. Besides soldiers, they are excellent couriers, and are often employed to carry messages long distances on foot, running the greater portion of the way. In twenty-four hours, they have been known to run from forty to fifty leagues.*

While I was confined to my room, I endeavored to collect such information as was within my reach relating to the Indian tribes of the State; and as I wished to obtain a portrait of an Opate, Governor Cubillas was so kind as to send for *Tanori*, the head chief of the nation, (to whom I have before alluded), who lived thirty leagues distant. A few days after, the Chief promptly reported himself at my quarters, accompanied by his wife He was indeed a fine specimen of a man, being full six feet high and well proportioned, with a light complexion for an Indian; large piercing eyes, prominent and high cheek-bones, and a most determined expression of countenance. He often smiled, when his face wore an expression full of benignity. He was delighted when I told him that his portrait would be sent to Washington, where the President of the American people lived, and there hung upon the walls of a great room with those of other celebrated chiefs of the Indian tribes within the borders of the United States.

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* Velasco. Noticias del Estado de Sonora.

Mr. Pratt, the artist of the Commission, was ready when the Chief appeared, and at once proceeded to transfer the faces and busts of himself and wife to canvas. They remained in town for a week, and were promptly on the spot when required for their sittings. Tanori wore a large *serape* of dark blue broadcloth; the opening in the centre for the head being surrounded by a broad band of green velvet, bound with heavy gold lace. His garments beneath this were simply a shirt and pantaloons. His wife, who always accompanied him, was quite small, with a delicate complexion for an Indian, though strongly marked with the characteristics of her race. Tanori was greatly pleased with his wife's portrait, and expressed a strong desire to possess it. I promised him that if it should ever be published, I would send him a copy. From this chief I also obtained a full vocabulary of his language.

The other tribes of Indians in Sonora, are the Mayos who reside in the southern part of the State; the Tarahumaras or Taraumaras, who occupy the western portion adjacent to the Sierra Madre; the Yumas and

Cocopas of the Colorado; the Papagos of the interior; the Pimos, and Coco-Maricopas, of the Gila; the Ceres of the Gulf of California; and the Apaches. Of each of them I shall speak hereafter, in their proper places.

The exports from Sonora are chiefly wheat and flour. Copper was formerly exported in considerable quantities; that is now no longer the case. There was also an extensive trade in pearls, which were collected by the Indians of the Gulf; but I could not learn that much is now done in it. Silver and gold are among the exports; but even of these the amount is less than in former times.

Scarcely a week passed during my stay at Ures, that I did not hear of murders and robberies by small bands of Apaches in the neighborhood. On one occasion, sixteen valuable horses were stolen from a single hacienda, and a boy was carried away captive. Another time, several mules were taken from a rancho within a mile of the town, and the owner killed. Yet not an arm was raised in defence, nor were any steps taken to hunt out the thieves and murderers. I cannot refrain from relating here an incident that took place near one of the frontier towns, which affords a good illustration of Mexican pusillanimity.

A band of Apaches, venturing into the interior of the State, stole a large number of horses and mules, which they were driving off. No efforts had been made to check them, until at length a party of some forty-five men armed with muskets, united for the purpose. One of their number was an American, who took a prominent part in the expedition. They soon fell into the trail of the robbers; and about midnight, on reaching the top of a hill which overlooked a valley, they discovered the enemy below them, lying asleep around their camp fires; while at a short distance, their herd of stolen animals were grazing. A small party sent down the hill to reconnoitre ascertained that the Indians were but twelve in number. It was then proposed by the American, that he, with such others as would venture with him, should approach as near as possible, and each pick off his man; which should be a signal for the rest to rush forward and overwhelm them. The plan was agreed to, but only two Mexicans and one Opate boy, would venture to accompany the American.

The four crept quietly to within fifteen paces of the Indian camp, and took their position behind some bushes for concealment. Just as they were preparing to fire, a tremendous shout was heard, with a confused discharge of fire-arms from the party left on the hill. The Indians sprang at once to their feet and ran some paces back, leaving their bows and lances; but finding they were not pursued, they soon ran back and secured them. The small party of four, who were thus placed in an awkward predicament, endeavored to make good their retreat, dodging behind rocks and bushes, and occasionally discharging their guns at their pursuers, who were armed only with bows, arrows, and lances. On reaching the summit of the hill, their surprise was great to find that the cowardly crew left there, had abandoned their post and were in full retreat, driving some of the stolen animals, which they had managed to secure, before them.

After the Opate boy had been killed by the arrows of his enraged pursuers, his three companions succeeded in regaining their horses, and pushing on after the main body of the party. The Indians, meanwhile, had got before them, and, riding fearlessly up to the retreating Mexican horsemen, plunged their lances into their backs. Not one attempted to defend himself, or to discharge his gun. Quietly they submitted to be transfixed by the enemy's lances, until seven were killed. The American fearing all would be cut off, told them they must adopt one of two alternatives, as the only means of saving their lives; namely, either make a stand and defend themselves, or abandon the recaptured animals. The latter course was pursued. The animals were left; and the Apaches, having again secured their stolen property, retired.

This narrative exhibits the poltroonery of the Mexicans in no stronger light than do incidents continually taking place. I have been told by many Mexican gentlemen and military officers, that ten Apaches will put a hundred of the lower class of their countrymen to flight. They become panic-stricken; and if forced to discharge their guns, they do so at random, turning their faces and generally closing their eyes. In Chihuahua I heard of several stratagems used by the Mexicans, by which they had overpowered their adversaries; but in open fights, which are very rare, the Apaches are generally the victors. We often hear of the effect of fear upon a single mule, which will stampede a large herd, without their knowing the cause of the alarm. The Mexicans seem to be possessed of similar fears, which produce similar results.

On the 15th of December, I had so far recovered from my illness as to sit up the greater part of the day, and to walk out without assistance, although still very weak. I sometimes felt my strength failing me entirely, and my limbs becoming almost destitute of sensation. On this day, I resumed my diary, which had been suddenly broken off on the 5th of October.

The gentlemen of the Commission who had accompanied me to this place took leave of me to-day, to retrace their steps to Santa Cruz, and thence proceed to rejoin the surveying parties on the Gila. The party consisted of Dr. Webb, Mr. Geo. Thurber, Mr. H. C. Pratt, Mr. J. J. Pratt, and their attendants. They were kindly provided with an escort, as I have already mentioned, by Governor Cubillas. Not having any troops at his disposal, he gave me an order on the Alcalde of each town through which Dr. Webb and his party should pass, who were required to furnish him with eight mounted and armed men to the next town, and so on, to the place of his destination.

December 16*th.* News was brought in to-day that a large band of Apaches were ravaging the country to the west; and that after attacking and robbing several haciendas, they had proceeded southward towards Hermosillo.

December 19*th.* The town was thrown into a state of alarm, by the news of a fight between a body of Mexicans and the Apaches before referred to, in which the former were completely cut to pieces. It seems that an effort had been made to arouse the inhabitants of Hermosillo to their danger, and induce them to send out a force to expel the invaders. But strange as it may appear, this town, with a population of thirteen or fourteen thousand souls, could muster only forty hired men to send against a party of about one hundred Indians, who were ravaging the richest portion of the State, murdering its inhabitants, destroying their crops, and robbing the haciendas and ranchos of their most valuable stock. These men were armed and mounted, and sent in pursuit under the command of an officer. They came up with the enemy about five leagues from Ures; but what was the result? The Indians immediately made a desperate charge upon the Mexicans, putting the whole body to flight, and killing about thirty of their number. The officer and a few others, who succeeded, after being hotly pursued, in making their escape to Ures, reported themselves to be all that survived; but a few stragglers subsequently turned up. The officer's own excuse was, that his men all fled; and it being useless for him to attempt to cope with the enemy single handed, he was obliged to run with the rest to save his life. I saw a gentleman a few days after, who visited the spot where the fight took place. The Mexicans were all *lanced in the back*, and their muskets, which were found lying by their sides, *had not been discharged*. The Apaches care little for fire-arms themselves: they can neither keep them in order nor obtain ammunition; and as long as they have nothing but Mexicans to contend with, their bows, arrows, and lances, are quite sufficient.

December 20th. A band of fifty Indians of the *Coco-Maricopa* tribe, from the river Gila, arrived in town this morning. The object of their visit was to complain to the Governor of the attacks made on them by the Yumas of the Colorado and the Apaches, and to beg that they might be furnished with fire-arms to defend themselves against the common enemy. These Indians had a totally different appearance from any I had seen. They were entirely destitute of clothing save a breech-cloth of coarse stuff of their own manufacture. They wore no covering on their heads, and were without any protection to their feet. Their hair seemed never to have been cut, but was clubbed up in a great bundle, and hung about half-way down their backs. In front, it was cut off straight across the eye-brows, while the earlocks were suffered to fall down by the side of their faces. On being informed by Governor Cubillas, that there was one among them who spoke Spanish well, and acted as the interpreter of the band, I requested that he would do me the favor to send the man to me. He readily complied with my request, and in the after part of the day the Indian, with several of his naked companions, presented himself at my quarters. I kept them a couple of hours, taking down a vocabulary of their language; at the end of which time, they exhibited much drowsiness, and said they were hungry. I sent out for some bread, but asked them to wait until I got through before eating it. They could not be restrained, however; and finding it no easy matter to take down their words while they were munching their food, I was obliged to give up the task, with a request that they would call on me again in the morning. These men readily answered all my questions about the Gila; and I learned from them that, a short time before, a party of Americans had passed through their villages, which, from their account, I believed to be the engineers of the Boundary Commission. One of them had several notes from Americans who had passed through their country, certifying to their friendly disposition, and requesting kind treatment for them in return.

December 21*st*. My Indian friends were at my quarters by eight o'clock, accompanied by several of their companions, three of whom, claimed to be "capitans," or chiefs. Whether they were or not, I cannot say, but believe they styled themselves such, in order that they might with more propriety claim some presents from me, and particularly some recommendations. These certificates they prize very highly, on account of the favors they procure from emigrating parties passing through their country. I gave testimonials to the three who called themselves chiefs, stating that they were friends of the Americans, and requesting my countrymen to treat them kindly and deal fairly with them. I attached to each note a large red seal and a piece of red ribbon, which decorations pleased them much. These acquisitions were carefully enveloped in several wrappers, and then put into a deer-skin pouch, which was fastened around their waists. Having completed my vocabulary, I presented them all with some bread, and also several yards of heavy cotton cloth, which they expressed a desire to have above every thing else. They gave me their names as, *She-pan-wa-ma-ki*, *Hum-su-il-lya*, and *Che-ma-dul-ka-keo*.

The pleasing news arrived by courier that Tanori, the Opate chief, who went in pursuit of the Apaches before mentioned, had given them battle this morning and completely routed them, killing many of their number and recapturing the animals which they were driving off.

December 23*d.* This morning, when walking near the town, I perceived a cloud of dust on the plain, which I soon discovered to proceed from an immense drove of animals approaching. As they drew nearer, I saw that they were escorted by a body of armed men on horseback and on foot, who seemed to be in high glee, and who were saluted and cheered as they passed by the crowds who met them. They proved to be the horses and mules recaptured by Tanori from the Apaches, which were now being brought to Ures, to be reclaimed by their respective owners. I was subsequently informed by the Governor, that there were eight hundred and sixty animals altogether, and that among them were some hundreds of the finest stock in the State. They were placed in the plaza, where the owners on identifying them, and paying three dollars each, were permitted to take their property. This charge was to defray the expense of driving them in, and for subsisting them.

An incident connected with the expedition of Tanori, deserves to be mentioned here. At the first fire of his men six Apaches were killed, and one was left by his companions mortally wounded. This man sat alone on the plain near a tall petahaya, the blood trickling from his wound and gasping for breath; but at the same time, clenching in his death-grasp his full drawn bow. His pursuers were thus kept at bay, knowing the certainty with which an Apache warrior marks his victim. The Opates were all armed with muskets or escopettes; and they discharged no less than ten shots at the dying Indian, not one of which took effect. At length an Opate lad of sixteen boldly advanced with his gun to within a short distance of the wounded man. The quick eye of the Apache was fixed on his antagonist as he approached him. The young Opate levelled his gun and quickly pulled the trigger. The Apache at the same instant let fly the never-failing and deadly arrow, which, skimming over the plain, buried itself deeply in the neck of the warrior boy, and laid him dead on the spot. The ball of the Opate was equally sure. Both were slain.

December 24th. Dr. Vassbinder, a physician from Canada, attached to the Mexican army, arrived to-day from Arispe, bringing the painful news that General Garcia Condé, the Mexican Commissioner, had died at that place on the 19th instant. I learned from him that the General, whom I left at Santa Cruz on the 29th of September, was taken ill a few days after, and lay for somet ime at the point of death. On getting somewhat better, he was with much difficulty carried to Arispe, where he could have the benefit of a physician, besides having more comforts than in such a filthy, miserable, and unhealthy place as Santa Cruz. But the journey was too much for him: he suffered a relapse which baffled his attendant's skill, and died on the 19th instant. It was a singular coincidence that the General, who had left Arispe when quite young, had not visited it again until he was taken there to die; and that this event should occur in the very house in which he drew his first breath. General Condé was but 47 years of age. He was an accomplished engineer, and a most amiable and estimable gentleman. Our intercourse had been of the most friendly and agreeable character; and he had ever shown himself ready to aid the American Commission, while we were within the jurisdiction of Mexico, in any way that lay in his power. He had filled many important positions under his government, among which I may mention those of Secretary of War and the Navy, Director of the Military College, and Deputy from the State of Sonora to the Mexican Congress.

I received a letter to-day from Dr. Webb, announcing the safe arrival of his party at Magdalena. He gave me an account of an American named English, whom he had found at the village of Rayon, where he was kept in bondage by a Mexican. This man, who professed to be of a respectable family, had found his way into this country during the war, and had been taken into custody by the man he was still with. He stated that he was not permitted to communicate with his friends, and had no means of escaping. I made the facts known at once to Governor Cubillas, and requested him to investigate the matter, which he assured me he would do immediately.

December 25th. General Flores, Commander of the military forces in Sonora, Colonel Garcia, a gentleman whom I had before seen in Arispe, and Captain Morfi, arrived from Arispe and called on me in the evening. From them I learned additional particulars of General Condé's illness and death.

December 26th. Time was now hanging heavily on my hands. I felt extremely anxious to get off, but was still unable to sit upon a horse. The usual mode of travelling through Sonora is on horseback, while pack-mules do the transportation of goods. There are a few wheeled vehicles here, and among them some very fine private carriages, which are used between this and Hermosillo, where the road is good; but they cannot be employed except with difficulty in traversing other parts of the country, owing to continuous mountain chains which intersect the State on the north, east and south. Governor Cubillas had interested himself much for me, and promised to apprise me of the first opportunity that offered to go to Guaymas, or even to Hermosillo. To-day he called with the pleasing news that in three days I should have a conveyance.

It did not take me long to prepare for my journey; for when I left my party on the San Pedro in September I expected to be back in eight or ten days, and consequently made but small provision for my trip. My wardrobe therefore was very meagre. A portable cot, bedding, and a single camp stool, with my fire-arms, constituted all my other effects. I now found it necessary, to procure some cooking utensils, and a few articles for a camp chest, as there are no hotels in the country, or any public places of entertainment. Besides these, I had to get an animal for my servant to ride, and two pack-mules, for transporting the luggage, and an arriero to attend to them.

CHAPTER XX.

URES TO GUAYMAS.

Leave Ures—Rich valley—Tapahui—Don Manuel Gandera—His large estates—Successful farming—Statistics of his haciendas—Silver mine—Reach Hermosillo—Governor Aguilar—The Ceris Indians—Obtain their language—Account of the tribe—Mode of poisoning their weapons—Description of Hermosillo—The Sonora River—Productions of the valley—Business relations—Sketch of the town—Departure—Meet French emigrants—Description of the country—Its barrenness—Business-like mode of milking cows—La Cieneguita—Buena Noche—Reach Guaymas—Mr. Robinson, the U. S. Consul—Description of Guaymas and its Campo Santo—Its harbor—Commerce—Intense heat—Departure.

December 29th. The carriage which my excellent friend Governor Cubillas had secured for me, was at my door in good season this morning. It was a small Scotch built vehicle, of an antiquated form, with two wheels, and very comfortable. Taking leave, therefore, of my kind and attentive physician, Dr. Campbell, and his amiable wife and family, to all of whom I shall ever feel grateful, I was helped into my chaise and bade adieu to Ures, where I had been confined eighty days. I still felt very weak; but my appetite was good, and I hoped the exercise of riding would be beneficial.

The road from Ures is excellent for several miles, extending along the bottom land of the Sonora River, which is one continuous cornfield, to the village of Guadalupe, six miles distant; after that, still keeping in or near the valley, and often crossing the stream, the road becomes more hilly, and in many places there are bad gulleys. It is then hard and smooth to Tapahui, twenty-seven miles from Ures.

I reached this place, the residence of Don Manuel Gandera, the former governor of Sonora, at 4 P. M. Having a letter of introduction from Governor Cubillas, I drove at once to his hacienda. I was kindly received by Mr. Rohnstadt, a German, the head manager of the extensive estate of Don Manuel, who was absent, having a few days before gone to Guaymas.

The whole village of Tapahui belongs to Señor Gandera, who is reputed to be the richest man in the State. He cultivates with great success many miles of the luxuriant bottom lands of the Sonora River, which runs directly through his estates, and from which they are irrigated. The houses are of adobe, well built and spacious. They stand chiefly around or immediately adjacent to a large plaza, and are exclusively occupied by the overseers and employees of the owner.

Mr. Rohnstadt accompanied me over the place, and cheerfully answered all my inquiries. And on my expressing a desire to know the statistics of the estate, which showed the most successful farming I had yet seen in Mexico, he invited me into his office. Requesting me to be seated, he took down the farm book, and turned to the result or balance of the previous year, from which he permitted me to make the following extract:

8000 fanegas (about 21000 bushels) of wheat,
2000 " (" 5250 ") of corn,
500 " (" 1050 ") of beans [frijoles],
250 " (" 656 ") of barley,
100 " (" 262 ") of pease,
70 wagon loads of sugar cane,
From 60 to 80 loads of soap, worth $30, each.

In addition to the above there was raised a variety of vegetables, which were furnished to his laborers, and never sent to market. Such were the agricultural products of the estate.

Don Manuel, besides being an agriculturist, is one of the most extensive raisers of stock in the country, as the following list of animals now on his farms will show:

16,000 sheep,
700 mules,
108 stud horses,
1620 breeding mares,
348 cow calves,
355 bull calves,
62 young mules, }
269 mare colts, } product of last six months.
165 stud colts, }

The wool gathered from the sheep is manufactured into *serapes*, or blankets. Of these there were made by hand during the year nearly fifteen hundred, varying in value from four to eighty dollars each. Mr. Rohnstadt showed me piles and bales of these articles ready for market, many of them of brilliant colors and fine texture. The serape is the principal garment of the Mexicans. It serves them as a covering at night, and is alike worn to protect them from the cold and from the rain. A considerable demand therefore exists for the inferior qualities among the hands on the estate.

One would suppose that the cultivation of such large farms, and the raising of so many horses, mules, and cattle, would be sufficient for one man to attend to successfully; but Don Manuel does not stop here. He is the owner and successful operator of a large cotton mill near Tapahui, which I had not time to visit, and of a silver mine.

The books of this gentleman were admirably kept, exhibiting a correctness of system which would be creditable in the counting-room of one of our New-York merchants. Mr. Rohnstadt kindly permitted me to make the following abstract of the list of employees on his establishment.

414	laborers,
52	muleteers,
19	mechanics,
23	herdsmen,
16	shepherds.

This list embraces those only who were employed on the farms.

He possesses also a silver mine, which had been worked for only five months. In it are employed eighty-five men, who receive from six to twelve dollars a month and their subsistence. The last monthly payment for wages and rations amounted to thirteen hundred and fifty-nine dollars. ($1,359.) The produce of this mine the first five months after it was opened, amounted to fifteen thousand nine hundred and fifty-six dollars. ($15,946.)

The comforts and conveniences about the house, I cannot say were in keeping with the magnificent scale of the establishment. But this is excusable in a place situated so far in the interior, when even on the coast at the port of Guaymas, the luxuries which wealth usually commands are not to be obtained. The enjoyment of these must be left for the next generation.

December 30*th*. Left Tapahui after breakfast. The natural road continued down the valley, hard and smooth, and was quite equal to a well made turnpike. Passed several haciendas and ranchos, with extensive and highly cultivated grounds. The chief products seemed to be wheat, with a limited proportion of corn (maize) and beans. Little attention seemed to be paid to the cultivation of other cereals, fruit, or vegetables. The heat was very oppressive, there being no top to the chaise; but as the road continued good, I hurried on, and at 4 o'clock reached Hermosillo, distant twenty-seven miles. I drove at once to Señor Majocci's, an Italian, to whom I had a note from Mr. Thurber. Mr. M. gave me an excellent room in his house, to which I had my baggage transferred and my cot set up, and furnished me with other conveniences to render me as comfortable as possible.

December 31st. Mr. John P. Brodie, a Scotch gentleman, called on me early this morning. Mr. Brodie has been in Mexico thirty years, during which time he has resided chiefly in Sonora. He is a gentleman of intelligence, of thorough business habits, and is much respected by the Mexicans, as well as by all who come in contact with him. Mr. B. like many foreigners who come here, married a Mexican lady; and by her he has had nine children, most of whom are living. Don José Aguilar, who was Governor of the State, and resided in Ures when I arrived there, also called this morning. He informed me that on the Monday following, he should set out for Guaymas, and politely offered me a seat in his carriage. This was as pleasing as it was unexpected; for the conveyance I had had was only to this place, and I had to take my chance of getting to Guaymas the best way I could. I should else probably not have got off under a week or ten days, nor would the means offered have been so well suited to my feeble condition. I had now only to obtain pack mules to carry my baggage, and arrieros to take charge of them. But to relieve me of all trouble, Señor Aguilar kindly offered to make arrangements for these also.

Desiring to employ my time to some advantage during my stay here, I requested the aid of Governor Aguilar in procuring an Indian of the *Ceris* tribe from whom I could obtain a vocabulary of his language. This he had promised me to do when I met him at Ures; and at once he despatched a messenger to a pueblo or village of these Indians near Hermosillo. The person sent for made his appearance in a few hours, accompanied by several young Mexican gentlemen of education, who remained during the interview, manifesting much interest in my undertaking, and assisting me in obtaining the words correctly. The native was a good looking man, about thirty years of age. His complexion was fair, and resembled that of an Asiatic rather than an American Indian. His cheekbones were high, and his head round and well formed, though the anterior portion was somewhat angular and prominent. His hair was short, straight, and black. He was a full-blooded Ceris, and came originally from the island of Tiburon. In about three hours I completed the vocabulary quite satisfactorily to myself, and somewhat to the surprise of my Mexican friends when they heard the Indian so readily recognise each word as I read it off in his native tongue, and then give me the Spanish equivalent. I found it an extremely harsh language, very difficult to express with our letters, and totally different from any aboriginal tongue I had heard spoken.

The Ceris tribe of Indians, with the exception of those which are christianized and reside in the village near Hermosillo, occupy the island of Tiburon in the Gulf of California, north of Guaymas. Although believed not to number over one hundred warriors, they have long been the dread of the Mexicans between Guaymas and Hermosillo, as well as the country to the north, on account of their continual depredations and murders. Their practice is to lie in wait near the travelled roads, and there surprise small and unprotected parties. Their place of abode being on an island or the shores adjacent, and their subsistence being chiefly gained by fishing, they have no desire to steal animals, which would be of no use to them; nor do they take any prisoners. To murder and plunder small parties of Mexicans, seems to be their only aim, and every arrow or lance thrown by the Ceris that pierces the skin, causes death, as all are poisoned.* Many expeditions, fitted out at a great expense, have been sent against them; but, though commanded by competent officers, all have failed. The number being so small, they manage when pursued to conceal themselves where they cannot be found. The island of Tiburon, as well as the main land adjacent, is exceedingly barren and destitute of water; hence parties have suffered greatly in the campaigns against them, without accomplishing any thing. I was told that the government had already expended more than a thousand dollars for every male of the tribe. The last serious attack of these people was made upon a gentleman travelling to Guaymas in his carriage with his family and attendants, embracing sixteen persons. They were surprised in an unfrequented place and every soul put to death.

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* I was told that the Ceris tipped their arrows with poison; but how it was effected I could never learn. Lieutenant Hardy, who made a voyage up the Gulf in 1826, visited Tiburon, and had some intercourse with this people, thus describes the process: "They first kill a cow, and take from it its liver; they then collect rattle-snakes, scorpions, centipedes, and tarantulas, which they confine in a hole with the liver. The next process is, to beat them with sticks, in order to enrage them; and being thus infuriated, they fasten their fangs and exhaust their venom upon each other, and upon the liver. When the whole mass is in a state of corruption, the women take the arrows and pass their points through it; they are then allowed to dry in the shade."—*Travels in Mexico. London*, 1829. p. 298.

My attentive friends here, particularly Don Francisco Velasco, to whom I feel under great obligations, were quite desirous to know my opinion respecting the Ceris tribe and their language; but it was impossible for me, without a close philological comparison with other Indian languages, to arrive at any correct conclusion as to whether this people are allied or not to other aboriginal tribes. This curiosity arose from a notion, which I found to prevail in many parts of Sonora, that the Ceris were of Asiatic origin, in proof of which, some statements were made too improbable to repeat. This idea seems to have originated from the resemblance between their name and that given by the ancients to the Chinese.

Hermosillo is the modern name for the old presidio of Pitic, which belonged to the company of Horcasitas. It is thirty leagues distant from the nearest point of the shores of the Californian gulf, and thirty-six leagues from the port of Guaymas, which lies nearly south. It is by far the largest and finest city in the State. In 1840, its population was 13,665, including about 2000 Yaqui Indians, who are the laborers of the town and dependent upon it. It was believed to contain 4000 more in 1845, when the essay was written from which I have obtained these facts.* It has a large trade with Guaymas ; from there it receives all its goods, which are distributed from Hermosillo throughout the State ; and in return, the products of the State are chiefly concentrated here for transportation to that place. The climate is dry and exceedingly hot, the thermometer ranging during the day from 95 to 98° Fahrenheit, and often exceeding 100°. Notwithstanding this intense heat, the place is considered healthy, it being free from the epidemics which too often accompany such high temperatures. This may, in some respect, be owing to a westerly breeze, which springs up in the evening, as at San Francisco and other places on the Californian coast, and brings with it the cool air from the ocean. This sudden change of temperature doubtless arises from the intense heat on the desert during the day, when the air in a rarified state passes upwards into the higher regions. As the sun descends, the air rushes in from the ocean to fill up the vacuum. This will account for the prevalence of the south-westerly winds at certain seasons throughout the country between the Gila and the Californian gulf, and the moisture they bring with them. The winter is moderate and the temperature variable, sometimes reaching 90 degrees. The weather to-day, 31st December, would be called hot in New-York; and I noticed that even the inhabitants sought the shady side of the street.

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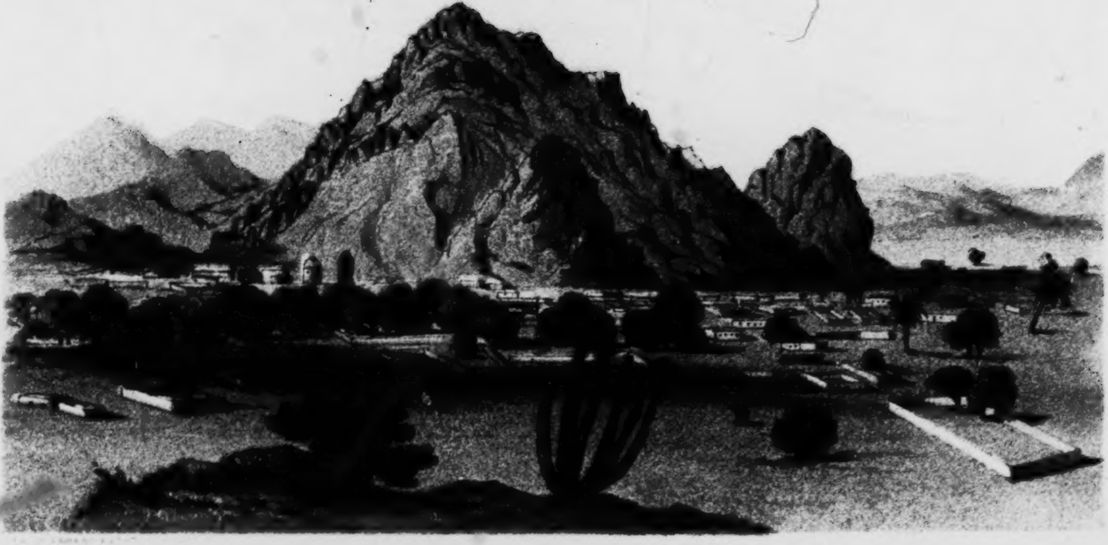
* Noticias estadisticas del Estado de Sonora, par José Francisco Velasco. *Mexico*, 1850.

The town lies in a valley almost ten miles in length by four in width. It is closely hemmed in on the east by a mountain or rugged pile of rocks composed of crystallized carbonate of lime, of a beautiful texture, in which white and cream color predominate, relieved by dark and deep indentations. It is called *La Sierra de la Campana*, or the Bell Mountain, from the fact that the sonorous material of which it is composed emits a sound when struck. Several small ranges of mountains, known as the Colorado and Chanati sierras, encompass the valley, through which flows the Sonora River, furnishing sufficient water to irrigate the lands adjacent. This river, which rises near Cocospera, has two great branches; the eastern or Ures branch generally bears the name of Sonora River. The western branch has several appellations, but it is usually called the San Miguel. They unite near Hermosillo, and, after flowing half way to the gulf, lose themselves in a *cienega*, or swamp. Along the margin of the city runs a large acequia, which is intersected by others in various parts, furnishing an abundant supply of water, and receiving in return an immense amount of dirt and offal. It is surprising to a stranger to behold the diverse uses to which these acequias are applied. They are in one place a public bathing tub; at another half a dozen women may be seen washing; a little further on an animal is being butchered; and at the next house the people are taking up water for cooking.

Taken as a whole, Hermosillo is the best built town I had seen in Sonora. Some of the private dwellings are large and substantial, with pleasant and tasty exteriors, and handsomely furnished. No houses showing the bare mud walls are seen in the principal streets, as is usually the case in El Paso del Norte, but all are colored, and often ornamented with columns and pilasters in good taste. The court-yards are filled with orange trees and flowering shrubs. The Alameda, or public walk, which extends along the margin of the town, is not yet remarkable for its beauty; time, however, is only wanted to render it a place of great attraction. It is well filled with trees, among which



HERMOSILLO, SONORA.

is the beautiful palm. This park possesses an historical interest, having been the scene of a bloody action during the civil war between Urrea and Gandara.

The valley produces annually about 25,000 fanegas (65,600 bushels) of wheat; 10,000 fanegas (26,250 bushels) of maise, and about 5000 fanegas of other cereals. Vegetables are not cultivated to any considerable extent; onions, sweet potatoes, chili, and pumpkins constituting the entire supply. It is true there may be some others cultivated, but they are not common. Cacahuates (pea-nuts) are also raised here. Of fruits there is a great abundance, including grapes, melons, figs, oranges, limes, lemons, citron, peaches, and pomegranates. The figs are very fine; but the people do not know how to preserve them. The guava and plantain have lately been introduced, and are found to succeed. But the vine is most extensively cultivated; not less than 1500 barrels of brandy, of 125 cuartillos each, are annually made. Of the quantity of wine made I have no knowledge; but that it is superior to that of the Rio Grande there is no question. Cotton was formerly cultivated, and found to be of an excellent quality; but the plants became diseased, and it is not now raised to any extent. The sugar cane does not flourish here; nevertheless, the Ceris Indians of the Pueblo cultivate enough to supply themselves with *panoche* (sugar); and it has lately been tried near the coast with so much better success that it is believed it may yet be produced in a sufficient quantity to supply the State, if not for exportation. There is an extraordinary fertility in the bottom-lands of Sonora; though I do not know that they surpass in this respect similar lands in California, the products of which astonish the agricultural world. It is stated by Velasco, in his statistical account of Sonora, before alluded to, that the product of wheat at the hacienda of the Señores Astiaseranes of Horcasitas is from two hundred and fifty to three hundred to one; and that the haciendas at Tapahui, of which I have before given the details, are equally productive.

Hermosillo is a place of extensive business relations with all parts of the State, and has some large wholesale establishments for the sale of dry goods. There are scarcely any American goods sold here, though admitted to be of a superior quality. Yet I saw in the warehouses here, as well as in Ures, various cotton goods of British manufacture, bearing the stamp of the Blackstone and Lowell mills. French manufactures, too, are common. In fact, the entire market of Sonora seems to be supplied by England and France.

Some little is done here in the mechanic arts, more, indeed, than in any place we had yet visited. The working of leather is one of the most important branches of manufacture in the country. It is made up into saddle covers, leggins, and other articles, which are figured, inlaid, and embroidered with much taste and skill. A fine saddle cover, consisting of a piece of leather covering the entire saddle, and hanging down nearly to the stirrups, often costs a hundred dollars.

The old mission church still remains in good preservation, but its adornments are without much beauty or interest. A new one, at the opposite end of the town, that of *Nuestra Señora del Carmen*, is quite neat and beautiful, both in its exterior and in its internal decorations.

January 1st, 1852. All the shops were open to-day, the same as on other days of the week. Several of the young gentlemen with whom I had become acquainted called on me this morning; and hearing me express a desire to take a sketch of the town, one of them procured a carriage and took me to the nearest elevation. I went to several parts of the town, but could not obtain a good view of the place and the picturesque scenery around it at the same time. I finally selected a spot facing the Sierra de la Campana, which gave a tolerable view of the town as a whole, and the rugged mountain at its side. The Alameda extends for a good distance along the front of the town, concealing, to a great extent, its finest houses. It is impossible to represent in one view any of those Mexican towns built upon plains, as they usually are. The streets being narrow, and compactly built, and the houses generally of one story, there is presented to the eye, when seen from an elevation, an unbroken mass of flat roofs, with few picturesque objects to break the monotony. Every town, it is true, has its church, which is crowned by towers and a dome. These I have always endeavored to introduce in my sketches.

In the evening I dined with my obliging friend Mr. Brodie, who cashed my draft on the government, thus enabling me to repay Governor Cubillas for his advances. He also procured for me both Mexican and American gold; so that I should not be troubled as to money in whatever territory I should find myself.

January 2d. Left Hermosillo at two, P. M., with Señor Don José de Aguilar and his brother, in a comfortable covered carriage, affording a good protection from the heat of the sun, which was very great. Pack mules and arrieros, with our baggage, and extra mules for the carriage, accompanied us. Soon after leaving, we met a party of one hundred and fifty Frenchmen, who were emigrating from California, and destined, as I afterwards learned, for Cocospera, with the design of establishing a colony there, as well as of working some mines. They were a rather hard-looking and determined set of men, with long beards and sunburnt faces. Each one carried a musket or rifle, besides which many had pistols.*

The country, after leaving the immediate vicinity of the river, is miserably poor. The road, however, is excellent; and though it has been travelled for two centuries without a day's labor being expended on it, it is still smooth, level, and hard, the soil being a fine gravel. No continuous range of mountains intervenes between here and the coast. Detached and short ranges of moderate elevation rise here and there, all of which are avoided. It may with more propriety be termed a desert plain than a mountainous region. No streams exist in the thirty-six or thirty-seven leagues between Hermosillo and Guaymas, and the only water to be found is procured from wells; hence there is no village or settlement on the route, and but few ranchos. The following itinerary embraces all the ranchos along the road, which are the common stopping places for passing travellers and trains of merchandise:

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* This is the same party which subsequently had a difficulty with the government, set the laws at defiance, and closed by taking possession for a while of Hermosillo. Their leader afterwards committed suicide.

Hermosillo to El Pozo (the well), a rancho,	7	leagues,
El Pozo to La Palma (the palm), a rancho,	6	"
La Palma to El Pozito (the little well),	4	"
El Pozito to La Cieneguita (little marsh),	4	"
La Cieneguita to Noche Buena (good night),	7	"
Noche Buena to La Palmita (little palm), (now abandoned for want of water);	3	"
La Palmita to Jesus Maria, . .	3	"
Jesus Maria to Guaymas, . .	3	"
	37	leagues.

We halted at El Pozo, a well, with an ordinary rancho, being unable to proceed further, as our extra mules had not come up. At this place we made our supper with what we brought with us; after which we spread our blankets within the walls of the rancho, and there passed a comfortable night. The transportation of goods between Guaymas and the interior, is almost entirely upon pack mules. We met many *atajos*, or trains, loaded with various sorts of merchandise, destined for the inland towns, or bound for the port with loads of flour.

January 3*d*. We had intended taking an early start, so as to finish the day's march early; but the arrieros were slow, and in spite of all our efforts, we did not get off till after 8 o'clock, when the heat of the sun was already uncomfortable. The road was as good as yesterday, and the country as barren and uninteresting. The road sides were covered with various kinds of stunted trees and thorny shrubs, interspersed with numerous varieties of the larger kinds of cacti, some of which we had not before seen. Passed the ranchos of La Palma and El Pozito, and stopped at that of La Cieneguita for the night, fourteen leagues from our starting-place. The ranchos are ordinary farm houses of adobe, though pretty large. Each has a well, and supports more or less cattle and mules, according to the facilities for grazing and obtaining a supply of water. These establishments seem to be planted in the most forlorn-looking situations, where there is not a shade tree or a foot of cultivable ground. The whole business being the raising of cattle, their position is fixed solely with reference to grazing, which the cattle are said to find in plenty among the distant hills; though a passer along the road is at a loss to conceive where an animal can find wherewithal to sustain life. The cattle came up to the rancho for water, which is generally furnished from wells, and is raised by the bucket and sweep, or by the still more primitive apparatus of a raw-hide bag and rope, which is worked by hand, without the assistance of any mechanical power whatever.

Nothing could be obtained at these places but milk, and that only in the morning: I inquired for eggs and chickens in vain. Señor Aguilar, being well acquainted with the people from his frequent journeys between the two towns, was always well received and supplied with the best the rancho could furnish; yet tortillas and milk were all that could be got even under these circumstances.

The milch cows are managed by the women, and a peep into the corral at milking time would highly amuse our Yankee dairy people. The calves, being in an adjoining corral, are let in among the cows one or two at a time. These of course run for their mothers. The women then tie together the hinder legs of the cow thus designated, and while one holds a gourd shell, the other divides her time between drawing the milk and beating away the calf, which, not liking this appropriation of his breakfast, charges repeatedly upon the invaders and renders the process any thing but a quiet one. The cows are milked but once a day, and give not more than a quarter as much as our well-fed cows at each milking. Very little butter is made in the country, the milk being mostly manufactured into a sour and most indigestible article of the consistence of gutta percha, which is dignified with the name of cheese. Generally nothing is cultivated at these ranchos, the corn and flour consumed about them being brought from a distance.

January 4th. We did not get off any earlier than yesterday. Passed the rancho of Noche Buena without stopping. The next rancho, La Palmita, had been abandoned, its well having dried up. We had therefore to continue our journey to that of Jesus Maria, making altogether about thirty-nine miles. Here we watered. Soon after we arrived, my servant came in with the unpleasant news that my pack mule had given out at Noche Buena, and that it would be necessary to procure and send back a fresh one to bring in my baggage. A Mexican was immediately sent back with another animal; but as the distance was six leagues, and it was already three o'clock, I feared that my baggage would not reach Guaymas till very late, if at all, that night. We now proceeded on our journey, the face of the country continuing as before described; and soon after we experienced the most delightful sensation of inhaling the fresh and balmy air from the ocean, to which we were now drawing near. None but those who, like myself, have spent a year and a half on the parched and barren wastes of the interior of our continent, or similar arid plains in Asia or Africa, can form any idea of the delight with which one first breathes the moist and invigorating ocean breeze.

A range of low mountains runs along the coast, the summit of which assume most fantastic shapes. The most conspicuous of these peaks are the *Tetas de Cabra* (Goats' teats), two elongated cones rising side by side. Passing this range, we came in sight of the great waters of the Gulf of California, and riding a few miles further, we entered Guaymas.

Wishing to avail myself of the first vessel to Mazatlan, I immediately visited Mr. J. A. Robinson, the U. S. Consul, to ascertain whether any were soon to sail for that port. Mr. R. informed me that he had a schooner which had just cleared, and then lay aground in the harbor; that she would probably get off with the rise of the tide, about 9 o'clock in the evening. I told him the situation of my baggage, when he kindly offered to detain his vessel till morning, if necessary. Mr. Robinson then invited me to his house to dine, an invitation which I accepted; after which he provided me with a room and bed, to which I soon retired, and passed a most refreshing night after the fatigues of the day.

Guaymas stands on the eastern shore of the Gulf of California, in 28° north latitude, and 110° 40′ long. west of Greenwich. It is completely shut in from the sea as well as from the winds. Mountains protect it on the main, while islands with elevated hills surround it by sea. Next to Acapulco, it is the best port on the Mexican coast. The entrance from south to north is formed by the island of Pajaros on the east, and by the islands of San Vicente and Pitayas and the main land on the west. There is another entrance, called Boca Chica, from the south-east, having the island of Pajaros on the south and the shore of Cochori on the north, which terminates at the *Morro Ingles*, or English Hammock. From the principal mouth to the mole is about four miles, and the bay is of about the same extent. The bottom is so muddy, that ships which are obliged to remain some time, find it necessary to raise their anchors every week or so, to prevent their becoming too deeply imbedded to be extricated. The soundings commence with seven fathoms, and diminish gradually to two, at the side of the mole.

The bay abounds in fish of a great variety and delicacy; also with shrimps, crabs, lobsters, and oysters. But plentiful as these are, they are not easily purchased, and the market has no regular supply. The Yaqui Indians, who are the chief fishermen, after catching a lot, live and gamble upon the proceeds until the last *avo* (a small copper coin) is spent; when they are too often obliged to pawn their blankets for the means of hiring a boat to go and catch more.

The town stands close on the margin of the bay, occupying a narrow strip about a mile in length and not exceeding a quarter of a mile in width, when the mountains rise and hem it closely in. It is entered from the north by a single avenue, which forms its main street; and this is intersected by short lateral ones leading to the bay. The houses are built of stone, brick, and adobe. Those in the best parts of the town are plastered, which gives them a respectable appearance. There are several families of wealth here, whose houses are handsomely furnished, and who enjoy the luxuries of a residence near the coast. The streets are lighted at night, a convenience not noticed elsewhere. The place is supplied with water from wells in the suburbs, which is brought through the streets in leathern bags on the backs of donkeys. It is somewhat brackish, and at first unpleasant to the taste; but it is considered wholesome, and one soon becomes accustomed to it.* Below the town is the only neat cemetery we had seen in the country. The *Campo Santo* is generally a small inclosure in which bodies are allowed to moulder without any thing to mark the graves, the bones of former tenants being thrown out to make room for the new comers. Here are a number of neat monuments, and the ground is kept with some show of order. On the "feast of the dead" the bells toll day and night; and in the evening, the graves and monuments are surrounded with lighted candles, and visited by the friends of the departed. These kneel by the graves, while the priest, with a choir of singers, goes from one to the other, singing as many prayers for the souls of the departed as the survivors choose to pay for.

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* For the facts relating to Guaymas and Hermosillo, not derived from personal observation during my brief stay in these places, I am indebted to Velasco's "*Noticias Estadisticas del Estado de Sonora.*"

Although Guaymas has one of the finest ports in the world, and is a key to the interior of Sonora, it never enjoyed much trade until within a few years. The recent settlement of California, has doubtless given to its commerce a new impulse. Several ships and brigs were at anchor in the harbor, while others lay at the wharves; and the British steamer Driver, which is kept on the Pacific coast to facilitate and protect British commerce, makes monthly visits to this port. In 1845, there were exported from here only 8000 cargas of flour, of 300 pounds each. There are now many large and well filled warehouses of goods, such as would make a respectable appearance in one of our great commercial cities. Some of the retail dry-goods stores, too, are elegantly fitted up, and exhibit piles of the richest silks, satins, linens, and embroideries. I was shown by its owner through one of the largest establishments, and regretted that there was scarcely an article of American manufacture in the entire stock. Every thing was either English or French. I saw many articles which we can produce of equal or better quality, and quite as low; but it seems that our commerce has not yet found its way up the California Gulf. The market is so much better at San Francisco, that every thing rushes there.

As the soil in the vicinity is dry and stony, there are no gardens or cultivated spots in or near the town. Every thing comes from the interior. Maize, beans, and vegetables are brought from San Antonio and Santa Rosa, about ten leagues distant; while from the Yaqui River are procured sheep, fowls, and some grains. Shut in as Guaymas is from the sea, and on every side encompassed by hills or mountains, the heat is intense. In the summer the mercury often rises to 104° Fahrenheit in the shade, and from June to September it is seldom below 96°. During this season, when the wind blows from the desert plains of the north, it is so dry and parched as to be almost intolerable, destroying furniture and every thing else of wood. Scarcely a soul is then seen in the streets, every one remaining quietly within doors, and passing his time with as little exertion as possible. The place was formerly considered healthy; but of late, it has suffered terribly from epidemics, one following the other, until the town, in the brief space of two years immediately preceding my visit, lost one third of its population. Cholera and bilious fevers have been the chief epidemics.

In order to ensure the arrival of my baggage, which had not yet made its appearance, and about which I began to feel much uneasiness, Mr. Robinson kindly sent his most trusty servant on a fast horse back to meet the arrieros, and hurry them forward. I was desirous, while the man was absent, to go back to the hills and take a sketch of the place, but was afraid to expose myself to the sun, besides not wishing to delay the vessel any longer, should my baggage happen to arrive. At half-past three o'clock, Mr. Robinson's messenger returned. He had actually ridden back nearly to Noche Buena, where my mule gave out, when he met the lazy arrieros smoking their cigarritos and moving along at a snail's pace. They had been dozing away the morning, and, if left to their own devices, would not have arrived in two days.

After taking farewell of Mr. Robinson's family and my kind friend Señor Aguilar, to whom I shall ever feel under many obligations, I went on board the Maria, a mere pilot boat of fifty-seven tons burden, and we immediately put to sea with a fair wind.

CHAPTER XXI.

GUAYMAS TO SAN DIEGO, CALIFORNIA.

Voyage down the Gulf of California in a pilot boat—Barren coast—Island of Carmen—Loreto—Reach Mazatlan—Its picturesque appearance—Description of the town—Americans here—Embark for Acapulco—Land at San Blas—Visit to Mr. Horn, the Captain of the Port—Ride to the old town—Its beautiful position—Ruined condition—Visit an old fortress—Leave San Blas—Description of the coast—Volcanoes of Colima—Land at Manzanillo Bay—Its unhealthy climate—Laguna—Cargo discharged—Stupidity of Custom House official—Leave without papers—Reach Acapulco—Chinese hotel—Beautiful harbor—Castle of San Carlos—Unhealthiness of the place—Extreme heat—Noxious insects—Description of the town—Ancient commerce—Departure for San Diego—Crowded state of the steamer—Voyage up the coast—Arrival at San Diego—Rejoin the Boundary Commission.

January 6*th*. Our little vessel was much crowded with passengers, and I was compelled to put up with very uncomfortable accommodations. But my anxiety to reach San Diego, made me willingly submit to any inconveniences, not absolutely injurious to health, to accomplish my purpose. The wind was fresh from the north-west; and all the passengers, fourteen in number, were sick, except myself and an old voyager. I spent the day very pleasantly in reading some New-York papers kindly furnished me by Mr. Robinson. These were a delightful treat; for I had not heard from my family or the government, or seen an American paper for more than six months; and the latest intelligence I had had was of the date of May, 1851, or eight months previous.

January 7th. The north-west wind continuing, we made rapid headway under a close-reefed mainsail and foresail. Our little craft, which had seen rough weather in the harbor of New-York, scudded beautifully before the fresh breeze, half the time covered with water. The shores of the gulf were occasionally seen in the dim distance, rising abruptly from the sea, barren and desolate. In some places sandy beaches and desert plains intervened between the sea and the mountains. Saw the islands of Carmen and Catalina on our right. Behind the former lies the town of Loreto, the principal place on the Californian peninsula. As little has ever been written about this part of the world, I append a brief account of this town and its adjacent country, which will convey a correct idea of the peninsula.*

"Loreto stands in a valley of about two or three thousand feet wide, surrounded by wild and sterile mountains, of which that called "La Giganta" is the highest and least picturesque. There are two gardens in the place, in which the vine, peach, fig, quince, and date are cultivated. A considerable quantity of wine is annually made. Peaches and pears are dried as well as figs: the dates are preserved.

"The situation of Loreto being in a valley of very limited extent, in which there is only space for the town and two gardens, and there being no possibility of raising either wheat or maize, the inhabitants are obliged to depend upon Sonora almost for subsistence. Another circumstance renders the tenure upon which they exist very precarious. The hills which surround the town are chiefly composed of primitive rock, granite, and sandstone intermingled, with scarcely any soil upon them. They thus absorb but little moisture; and during the heavy rains, which happily do not occur more than once in five or six years, the rush of water through every part of the town, as it comes down the ravine, is so great, that instances have been known of some of the houses having been actually carried away.

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* Hardy's Travels in Mexico. London, 1829, p. 244.

"To prevent the occurrence of this danger, the former Franciscan friars, many years ago, erected a stone wall, to break the force of the water, and give it a new direction towards the sea. In successive years the rains washed this barrier away. Another was built, which shared the same fate; and at present there is but a slight trace that it ever existed.

The inhabitants of Loreto are of a dingy, opaque, olive green, which shows there is no friendly mixture in the blood of the Spaniard and the Indian. They appear to be the same squalid, flabby, mixed race, which is observed in almost every part of the Mexican coasts. The population does not exceed two hundred and fifty souls. The annual importation of corn from Sonora, is from 800 to 1000 fanegas. The exportations consist of soap, preserved fruits, wines, spirits, pearls, tortoiseshell and salt; the latter being obtained in a lake on the Island of Carmen.

January 8*th*. Our hopes of reaching Mazatlan to-day, were frustrated by a calm. Our little craft was tossed about by the dead swell much more than when ploughing the waves in a gale. Our Mexican passengers called on San Antonio to send us a breeze, but he heeded not their invocations. We now stood in towards the shore, and thus caught the land breeze, which wafted us onward with speed.

January 9th. Came to anchor in the harbor of Mazatlan at 8 o'clock; soon after which, we were boarded by the captain of the port. This gentleman, after looking over the list of passengers, gave us permission to land. I lost no time, therefore, in making my way to the shore, accompanied by Colonel Moreno, of the Mexican army, who was a fellow passenger. This gentleman, who was educated in the United States, and speaks English like a native, was of great service to me, being well acquainted at all places on the coast. Besides, his position gives him influence wherever he goes. The Colonel took me to a hotel kept by a Chinaman, where we took rooms. The bill of fare here displayed would compare favorably with that of our American hotels, and the cooking was excellent. Noticing several Chinamen about, attending to menial duties, I inquired of the landlord, if his cook was a countryman of his; but was told in reply that he was a German, to whom he said he paid $40 a month, which, in his estimation, was a very high price. The area or inclosure of the hotel had been converted into a cockpit, in which were some thirty or forty game cocks, each fastened by the leg to a small stake. It was well fitted up and protected by an awning.

Mazatlan has a very picturesque appearance, whethus approached from the sea, or by land. On the north side of the bay or roadstead is a long neck, or narrow range of rocky and fantastic looking hills, their sides exhibiting projecting crags and deep indentations, which the ocean has been lashing for ages. The extreme end of this promontory, which it should more properly be termed, is higher than the other portion, and of a sugar-loaf form. Beneath these hills on the verge of the sea, the houses are thickly crowded together. But the best portion of the town lies on more level ground, and directly facing the roadstead. On the south are rocky islands defending the harbor in that direction; but there is no protection from the west and south-west. Here the harbor is open to the broad Pacific; and when the wind is from that quarter, the sea rolls in with great force, from which ships can find no security. Serious disasters have happened here during south-westerly gales.

The town contains from ten to twelve thousand inhabitants. Its streets, though narrow, are well laid out, and lined with large and well built houses. More taste and luxury are looked for in commercial towns than in those of the interior, and accordingly we found Mazatlan to be considerably in advance of any town we had yet seen. The houses are more substantial and elegant, though unfortunately, in consequence of its narrow streets, they show but to little advantage. The style is wholly that of the old Castilian, with short columns, Moorish capitals, and ornaments. Many houses present long lines of colonnades. There are many fine and well filled shops. Those containing drygoods are neatly fitted up; and, in the richness of their goods,

MAZATLAN

vie with the fashionable stores of New York. The Spanish ladies are fond of dress; and I have no doubt the manufacturers of Lyons sell as rich silks in Mexico as they do in Paris or London.

In the afternoon I walked out to the suburbs for the purpose of making the accompanying sketch. I chose for my site an old burial place. In the foreground, are a number of small houses built of sticks and adobe, with pointed roofs, thatched with palm leaves. In the middle of the picture, less distinct, is the best portion of the town; while the harbor and northern promontory are seen beyond.

I found a number of Americans here, some of whom had been waiting a month for a steamer for San Francisco. Three days before my arrival, the regular mail steamer reached the offing, and sent a boat on shore for the mail, but refused to receive any passengers, on the ground that she was full. These people were greatly disappointed, and complained bitterly. Many had expended their last cent, and were now in great distress.

January 10*th*. Called on Mr. Gatton, the U. S. Consul, who received me kindly and extended many civilities to me. Mr. G., who is from Virginia, informed me that the income of his office was five hundred dollars less than his expenses. Board, office rent, postages, &c., were very high. He remained solely for the benefit of his health.

As the chances were against my getting a steamer for San Diego, I was advised to take a sailing vessel for Acapulco. At that place all the Californian steamers stop for coal; and as they arrive every week, I should not, at the farthest, be detained many days. To take a sailing vessel direct for San Diego or San Francisco, would require a voyage at this season, when northwesterly winds prevail, of thirty or forty days. I therefore determined to make the long voyage of some six hundred miles directly out of my way, as the quickest route to my place of destination, and at once inquired for a vessel. Fortunately for me, there was one to leave in the evening, and I lost no time in securing a passage.

Early in the evening I went to the place of embarkation on the beach; from which, as the tide was low, each passenger had to be taken in the arms of the Mexican boatmen, some forty or fifty yards to the boat. The vessel was more than a mile from the shore, and we were not a little puzzled how to find her among the number that lay in the offing. After much inquiry, however, we succeeded. Her name was the Miguel; and, though sailing under the Mexican flag, she was commanded by Captain Nye, a very clever navigator, hailing from New Bedford, Massachusetts.

Knowing the thievish propensities of the lower class of Mexicans, I directed my servant to keep a sharp look out for my baggage, while I stepped to the cabin to secure a berth. Soon after he was ordered to bring me my desk; and though absent less than a minute, he found on his return, that the boat which had brought us had pushed off, and a portion of my baggage was gone. The moment my servant had left them, they took what they could lay their hands on, jumped into their boat, and disappeared in the dark. Pursuit was useless. The articles lost were not of much value; but it was provoking, notwithstanding all my care, to be robbed by this rascally people wherever I went. While speaking of my misfortune, one of the passengers said his silk handkerchief had been taken from his coat pocket by the man who brought him in his arms to the boat. Two other passengers, on examining their pockets, found that they had sustained a similar loss. I could not help laughing, informing them that I had taken the precaution to secure a fine silk handkerchief I had just bought, by putting a couple of oranges in my pocket above it. "You had better look," said my friends, "and see what your precautions amount to." I did so, and found I had been operated upon as effectually as the rest.

January 11*th*—13*th*. These days were spent at sea, bound for San Blas, distance one hundred and twenty miles. We had expected to reach there in one day, but were retarded by light winds and calms. No incident occurred worthy of notice. We had some ten or twelve passengers, all Mexicans but three. Of these, one was a German, Mr. Mejer, a merchant of Colima, Mr. Augustus Harcourt,* a Scotchman, and myself. Mr. Harcourt had just arrived at Mazatlan from El Paso del Norte, by way of the city of Chihuahua, and gave me information from that place to a late date.

January 14*th*. This morning we entered the harbor of San Blas, at seven o'clock, and before we came to anchor were boarded by Mr. Horn, the captain of the port. Had that officer been a Mexican, he would not have visited us in an hour. All the passengers but three left us here.

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* This Mr. Harcourt was the same person who was formerly connected with the United States Quarter-master's office at Santa Fé, New Mexico, where he was guilty of some irregularities, such as placing the name of the Quarter-master to drafts on the government, to the serious loss of sundry merchants who cashed them, as well as to the Quartermaster himself.

Went on shore at ten o'clock, and met a fellow passenger coming out to our ship to invite me to breakfast with Mr. Horn at twelve o'clock. I accepted the invitation, and soon after paid my respects to this gentlemanly and accomplished officer. Mr. H. is by birth a Swede, and is married to a Mexican lady. Both are quite young. Their house is built of poles, after the manner of the country; the intermediate spaces are filled up with mud, which is plastered and whitewashed. The foundation is of stone, very thick, and rising about three feet above ground. On this rest the poles. These support a very tall and pointed roof of the same material, covered with cocoa-nut leaves and grass, closely bound together, so as to be impervious to water. The whole is open from the floor to the apex of the roof. This species of roof and thatching is universally adopted here, as well as at other places on the coast; and by giving a large space for the free circulation of air, it renders the house cool and comfortable. Mr. Horn's house is elegantly fitted up with well selected engravings, a variety of books in the Swedish, English, French, and Spanish languages, and furniture adapted to the climate. I have nowhere seen more taste and better arrangements for comfort in a hot climate than here.

After a sumptuous breakfast, Mr. Horn ordered three horses to the door, and accompanied Captain

Nye and myself to the old town of San Blas, three quarters of a mile distant, on the summit of an isolated rock from one hundred and fifty to two hundred feet high. This rock, which rises abruptly from a low, swampy, and partly wooded plain, is inaccessible on three sides. The northern side, where we ascended, has been cut away; and a winding path, of easy ascent, leads to the top. This road is closely lined with a dense forest of cocoa, banana, plantain, and other tropical trees, together with a thick undergrowth of flowering plants and vines, which are closely bound together, and prevent all ingress. The bold, rocky mass presents a most picturesque appearance. Portions of it exhibit a bare perpendicular front, while others are covered with a most luxuriant vegetation. The summit, which is about five hundred yards square, was formerly occupied by the town; but, owing to the unhealthiness of the situation, it has been deserted and suffered to fall to decay. The business of the town has long been transacted at the *Playa*, or shore, where we landed; but the custom-house has lately been removed to the spacious and commodious buildings on the rock, and the ruined tenements around seem about to become the abodes of men once more.

On reaching the summit of the rock, one first enters a large and elegant building of stone, with a colonnade around its inner side, and stuccoed with a snowy-white cement. On the outer side is a redoubt, built on the very verge of the rock, which is here perpendicular. Cannon of large calibre are arranged in the ports. This building, which seems to have been abandoned for a long time, is now undergoing repairs, and is used as a public warehouse, and for offices of the customs.

At the other end of the rock is a fine old church, built of dark gray stone, with some six or eight bells suspended in its ruined towers. The roof of the edifice has fallen in, and nothing now remains but its bare walls, which, owing to the solid manner in which they were built, are in good preservation. In front of the church is the plaza, which is completely inclosed by substantial stone buildings, some with tasty colonnades. Many of these buildings are in good preservation, while others are in a more or less ruined state. I noticed that some were undergoing repairs.

The custom-house was for many years at Tepic, twenty-five miles distant, of which San Blas is the port. It remained there on account of the unhealthiness of San Blas, which in former years suffered greatly from epidemics. The plain of which I have spoken is often under water; and the exhalations from it cause malignant fevers, besides giving birth to myriads of mosquitoes and sand-flies. During the rainy season, from June to November, the place is uninhabitable, owing to the torrents of rain, which destroy the houses, and perfectly insulate the rock. San Blas affords meat, various kinds of fruit, and vegetables, of which our captain laid in a supply. A stream comes in at the plaza, which affords a good boat harbor; but outside, ships are obliged to anchor in the open roadstead, where they are exposed to westerly gales.

Returning from this beautiful spot, Mr. Horn placed at my disposal the government barge, for the purpose of crossing the bay to an old ruined fort, from which

I wished to take a view of the town. There had been a large fortress here, with bastions; but it was now, and seemed long to have been, in a ruinous condition. Cannon of large calibre lay near the ports, where they were originally placed, just discoverable beneath the dense shrubbery and weeds which filled the inclosure. Their heavy carriages had entirely rotted way. I seated myself on an old gun, but had no sooner commenced my sketch than I was enveloped with a cloud of sand-flies and mosquitoes. In vain did I endeavor to beat them off, my friends lending me their assistance. My face, hands, and paper were literally covered with the pests. I submitted with as good a grace as I could, until the smarting pain of their bite compelled me to relinquish my task without obtaining the object for which I came. I returned to the house of my courteous friend, with whom I took tea, and at ten o'clock returned to the ship. The present population of San Blas is two thousand.

January 15*th*. At sea, having sailed during the night. Found our brig far more comfortable, in consequence of the reduced number of passengers.

January 17*th*. At sea, with a light wind off shore. In the afternoon found ourselves off the volcanoes of Colima, bearing east. Near the shore was a large and remarkably white rock, rising abruptly from the sea as high as the mast head. By this our captain was enabled to find the opening to the bay of Manzanillo, to which place we were now destined. There is a great uniformity in the thousand miles of Pacific coast which I have traced. A chain of mountains extends the entire length, and often rises abruptly from the shore. Even when a few miles intervene between it and the coast, the appearance from the sea is the same. Hence the openings of the various ports and harbors are difficult to detect, except where some bold promontory juts out into the ocean, or some island or rock is found near. The opening of Manzanillo Bay would not be observed by a passing vessel. But the bearings of the volcanoes, two well defined and lofty peaks, some forty miles in the interior, and the rocky island alluded to, conduct the mariner to the spot. We reached the entrance just at dusk; but as there was no chart of the bay, and several bold rocks showed themselves, the captain thought it prudent to stand off till morning.

January 18*th*. The morning found us becalmed some ten miles from shore. This was provoking, but there was no help. Fortunately in the afternoon a light breeze sprang up, and at five o'clock we came to anchor in the Bay of Manzanillo.

January 19*th*. The custom-house officer would not permit the cargo to be discharged until the ship's papers were sent to Colima, where the collector resides. When this was intimated last evening to Mr. Mejer, the owner, he procured mules and set off at once to attend to the matter personally. Colima lies on the opposite side of a low range of mountains which cannot be crossed; so that though but thirty miles distant in a direct line, it is between ninety and a hundred by the mule path, which is the only route to it. The day was exceedingly hot, so that I did not leave the vessel.

January 20*th*. To-day, although it continued very hot, I went on shore; the place consists of some twenty houses built of poles, with high pointed roofs, and thatched with cocoa and plantain leaves. These houses are ranged in a line along the beach, and are occupied by a cadaverous-looking people, who seem to have scarcely energy enough left to keep body and soul together. Found a German here, the commercial agent of Mr. Mejer, who spoke English well. I saw also two custom-house officials, who appear to be gentlemanly men. Beside these three, the whole population consists of the lowest class.

The Bay of Manzanillo, though little known, is one of the finest on the coast, being equally well protected against all winds. The place has no direct trade, and is merely resorted to as the port of Colima, which can be approached from the sea only through this bay. There is no arable land near save small garden spots about the houses, the hills rising directly from the sea and from the bay. Hence its admirable harbor, which is far superior to those of San Blas and Mazatlan, cannot be taken advantage of. Within a quarter of a mile is a lagoon and morass about two miles in width, and sixty miles in length. During the dry season this lagoon becomes nearly empty of water, when a pestilential effluvia arises which renders it extremely dangerous to all who live on the bay, and even to the crews of the ships which stop there. This, of course, will prevent any considerable settlement from ever being made here. Instances have occurred where every soul on board a ship has been taken sick and half of them have died, while stopping here a few days to discharge a cargo. My German friend cautioned me not to eat any fruit while here, even an orange, and to avoid the night air. The plantains, bananas, and oranges laid in by me at San Blas, have therefore been put aside to rot or be thrown overboard. The cheapness of these fruits on this coast is such, that a single dollar will buy enough for a voyage to San Francisco, allowing for a daily supply as much as one could eat.

Manzanillo Bay.

January 21*st*. A courier arrived very unexpectedly from Colima, with the ship's papers and permission to discharge the cargo. This news was received with much joy. A lighter was soon alongside, with a host of half-naked Mexicans, and all hands at once set to work.

This morning I took my gun and returned to the laguna, to see if there was any game. I found a log canoe, and coasted along its banks for a mile or more.

There was a great abundance of ducks, pelicans, cranes, and other water fowl; but I was so much exposed, that I could not get a shot. I now landed to try my chance from among the mangrove trees and jungle which grew on the banks. But here the difficulty of walking was so great, that it was at the hazard of my life that I attempted to penetrate the thicket; and I was glad to get out as quick as possible, reach the higher and dry ground, and retrace my way to the village. Besides I felt that there was some danger in exposing myself in so unhealthy a spot during the intense heat of noonday. This laguna had a most enchanting appearance. The exuberance of the numerous tropical plants which grew upon its shores, with the hills rising on every side, made it seem like a vast amphitheatre.

I noticed on the rugged hills at the entrance of the bay a number of the *petahaya*, or giant cereus, differing from the specimens of that remarkable plant which I had seen in Sonora, and which I therefore supposed to be another variety. These grew to about twenty or twenty-five feet in height, and had numerous and more slender branches. The rocks were so steep, and so thickly covered with cacti and dense shrubbery, that I made no attempt to approach nearer than to take a sketch of a perfect specimen, of which I had a fine view.

January 22d. Towards evening when the sun had got behind the hills, I went to some rocks at the end of the village and took a sketch. The cargo having now all been taken out, the captain went on shore for his papers, leaving orders to get the vessel ready for sea, when another difficulty occurred. The officer affirmed that the papers required the signature of the "Captain of the Port," who was at Colima, and positively refused to give them or sign them himself. A messenger was accordingly dispatched to that place again, and ordered to ride all night. A strong fair wind which was now blowing made this unexpected delay the more annoying; but we had no alternative and must quietly submit.

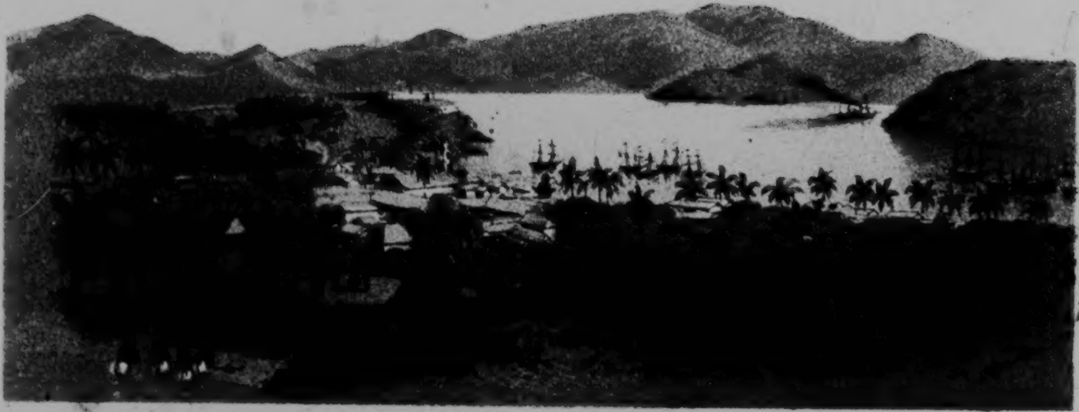
This Colima, which so long detained us, is the capital of a small state of the same name. It is said to contain 30,000 inhabitants, or half the population of the State. The city is remarkable in a historical point of view, having been founded by the "Great Captain" or conqueror of Mexico, Cortez himself, between the years 1522 and 1524, after his return from Spain. The town of Zacatula, twenty-five leagues to the south on the coast, was also founded by Cortez. This is a place of little importance, containing only about two thousand inhabitants.

January 25*th.* In the afternoon the messenger returned from Colima, bringing the papers for which we had been detained. The captain went on shore to get them, when it appeared that the stupid officer, by mistake had sent the passenger roll instead of the manifest and clearance papers to the collector. He was for dispatching the messenger again with the proper papers; but the patience of Captain Nye, as well as of the passengers, was now exhausted, and the captain declared that he would dance attendance no longer. We had been here a week, when a single day would have sufficed to discharge the portion of the cargo that was to be left at the place. The captain returned at once to the ship, and soon after got under weigh.

January 31st. Our voyage of six days had been attended with no incident. Calms and light winds prevailed, while the heat was extreme. The coast was mountainous and barren, presenting the same general features as before described. At 4 o'clock, P. M., we reached Acapulco. I lost no time in getting on shore; and instead of being attracted to a public house styled the American Hotel, where I saw large numbers of my countrymen, I went with my fellow-passenger to the Canton Hotel, kept by Quanahu, a native Chinese. This was the very perfection of neatness. The house, like all others in the place, was of a single story, with a large court in the centre. The floors and courts were all laid with brick or cement, and the walls were either colored or whitewashed. The landlord had long lived on the coast, and spoke Spanish well. Of English he knew nothing. His attendants, who were all Chinese, wore their native costume. Mr. Quanahu, like most foreigners who settle in the country, had taken to himself a Mexican wife, a genteel pretty-looking woman. During the evening, this lady, with a number of her young female friends, took their seats at one of the refreshment tables, and seemed to enjoy themselves mightily over their wine, cakes, ice-cream, and dulces; while Mr. Quanahu and his Chinese waiters supplied their wants as carefully as those of any of his guests.

February 1st. Acapulco has one of the finest harbors in the world. It is perfectly land-locked, and may be entered with ease by two passes. The most direct is by the *Boca Chica*, between the points of Pilar and Grifo, and is from 250 to 280 yards in width. The other is between the Isla de la Roqueta and the Punta de la Bruxa, a mile and a half in width. The hills which encompass the bay, rise abruptly; hence the water is very deep, and ships of the largest burden may approach within a few yards of the shore. A thousand vessels might lie within the harbor, and be amply protected against any wind. A stranger approaching the town by land, except just opposite the entrance, would imagine that he saw before him a placid mountain lake, rather than an arm of the sea. So completely inclosed is the town with high hills immediately behind it, that it enjoys little benefit from its proximity to the sea. On the western side, the bay is separated from the ocean by a narrow isthmus, about four hundred yards in width, where, it is said, nature intended forming a third entrance, but this has never been accomplished. One of the enterprising governors of Acapulco conceiving the idea of completing what nature had begun, actually caused an opening to be made through the mountain, which, as it answers the purpose of admitting the air, is acknowledged to be of essential service. This opening is called "*L'Abra de Sta Nicolas.*

At the extreme point of the town commanding the entrance to the bay, is the Castle of San Carlos, a formidable looking fortress. It is built of large blocks of stone, and is surrounded by a deep trench redoubt, but, like every thing else in the country, is much out of repair. The walls have been rent in several places from top to bottom by earthquakes; and where large portions had fallen entirely, the stones had simply been piled up again. Around this fortification I saw hundreds of well dressed people taking an afternoon walk,



ACAPULCO

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to enjoy the fresh sea air which a westerly breeze brought in. East of this, a bay makes up, and adjoining it is a marsh, where large numbers of small fish are left; these, becoming putrid under a tropical sun, help to engender the fevers which at certain seasons prevail here. Bilious cholera morbus is also common; and the Mexicans from the interior, as well as the numerous Americans who now stop here on their way to California, fall victims to these diseases. But these are not all the troubles of the Acapulcans: earthquakes and hurricanes often occur; the dry and burning atmosphere is almost insupportable; while noxious insects and reptiles infest dwellings or assail the inhabitants wherever they go. Baron Humboldt, who spent some time at Acapulco, and who has investigated the climatic influences of tropical America more than any other writer, does not hesitate to give his opinion, as the result of a comparison, that "the heat is more oppressive, the air more stagnant, and the existence of man more painful at Acapulco, than at Vera Cruz."*

The town stands on a narrow strip of land less than half a mile in width, on which there is but little soil. The houses are built of stone as well as of adobe, and covered with red tiles. Those of the better class, are whitewashed, and have a neat appearance; many have little niches in their walls, in which is placed a crucifix or image, in honor of some saint. I noticed many houses in a state of dilapidation: there is also an old ruined church, its walls and tower still standing, which is said to have been destroyed by an earthquake. A new and much finer edifice has since been built. In the skirts of the town, and partly on the mountain's side, is a class of houses built of poles, and having high pointed roofs thatched with palm and cocoa-nut leaves, that there may be a freer circulation of air; some of them are not inclosed, a few posts supporting the roof. It was near one of these primitive dwellings, a little elevated above the town, that I selected a spot from which to take a sketch of the place. I had here a good view of the whole town, its fine harbor, and the Castle of San Carlos, in the distance. A rank tropical vegetation concealed a considerable portion of the town, and extended nearly to the water's edge; among the varied foliage, the graceful cocoa-nut tree is most prominent; the palm, plantain, and banana, too, are thickly dispersed throughout it.

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* Political Essay on New Spain. Vol. IV. p. 145.

The market is open every morning from daylight until ten o'clock, in a corner of the Plaza. Fruits and vegetables of every variety are spread out; and the numerous passengers from the Californian steamers, usually rush to the market to lay in a stock of the delicious fruits there offered for sale. Change being scarce, small cakes of soap are used instead, as in other parts of Mexico.

It is surprising that this town has not become modernized, by the immense number of Americans and others, who stop here on their way to California. Every steamer remains for a couple of days to take in coal, when the passengers generally land and endeavor to spend some of their money, few as are the inducements to do so. There are a number of hotels, one of which, called the American, is kept by a German, and is any thing but what its name imports, both in appearance and the character of its company. The name attracts thousands, although the house kept by the Chinaman, called the Canton Hotel, is altogether superior in accommodations. One reason why the place does not improve, is, that no encouragement is given to foreigners to settle here, but quite the contrary. The government is jealous of them; and from what I heard and saw of the conduct of my countrymen, I fear it had too good cause to be so.

Acapulco owed its former importance to its commerce with the East Indies through the Phillippine Islands. This commerce was limited to a single ship of large burden, whose cargo was estimated to be worth from £300,000 to £400,000 sterling. When the news reached Mexico that she was off the coast, the merchants crowded to Acapulco from all parts. The exports from Mexico consisted of silver, cochineal, cocoa, wine, oil, and Spanish wool. The imports were chiefly China silks, India muslins and cottons, spices and aromatics, jewelry, and other articles of luxury and taste.

February 2d. The mail steamer "Oregon" and the propeller "Monumental City" arrived this morning from Panama for San Francisco. The former had four hundred and seventy-two passengers, the latter four hundred and fifty. After examining the latter, and finding her very crowded and filthy, I took a boat and boarded the Oregon. She too was crowded, but was clean and in excellent order. Captain Pierson, on my stating to him my position as a government officer charged with important duties, consented to take me, if I would put up with such accommodations as he had to offer. Every place was filled, even to the tables and floors of the cabins. The decks, too, had been monopolized; and the only place he could give me to sleep in was a hammock suspended in the rigging eight or ten feet above the deck. As the weather was exceedingly hot, I gladly accepted the accommodation. Returning to the shore, I hastily packed up my luggage, and was again on board the steamer at 3 o'clock P. M. At four we put to sea with a light wind.

February 3d–8th. At sea. Moderate winds from the north, continued during these six days. When off Cape St. Lucas, the weather suddenly changed, becoming so cool that I was obliged to give up my aerial sleeping place. By close stowing, room was made for me on the floor of the lower cabin, where I remained the rest of the voyage. I was also obliged to change all my clothing, and substitute thick flannels and an overcoat; nothwithstanding which, I had an attack of fever and ague. There was a good deal of sickness on board, chiefly fevers. Some had contracted disease from exposure when crossing the Isthmus of Panama, others by imprudence in eating fruit. A passenger from Cornwall, England, died and was launched into the sea, the burial service being first read by a Methodist minister. Passed a whaleman, the ship Carlton from New Bedford, sixteen months out. She sent her boat to us with a present of a large turtle, and requested some newspapers in return. A lot was accordingly contributed by the passengers, and sent to her. This is considered a good whaling ground, and we noticed many of these monsters of the deep sporting around us.

The character of the coast, whenever we were near enough to see it, was much the same as that from Mazatlan to Acapulco. Barren and rugged mountains rose abruptly from the sea, exhibiting a most dreary and forbidding aspect.

February 9th. We entered the bay of San Diego last night, about 11 o'clock. I was landed by a boat at the Playa, and took lodgings at a small house near the beach. This place is situated just within Point Loma, and is about a mile from the sea. The steamers merely run in and leave the mail. Sometimes they are obliged to take in a supply of coal to enable them to reach San Francisco, still nearly six hundred miles distant. I had now made a sea voyage of 1300 miles from Guaymas to Acapulco, and of 2000 miles from the latter place to San Diego. The first trip occupied twenty-six days including stops; the latter but five days.

After breakfast I procured a wagon to take me and my baggage to the town of San Diego, five miles up the bay. Here I learned that the surveying parties from the Gila had preceded me, and were three miles farther up at a small settlement. Continuing my ride, I reached the village at 10 o'clock, where I was first met by my excellent friend Colonel Craig, commander of our escort. He informed me that they had felt much anxiety on my account, as nothing had beeu heard from me after I left Santa Cruz about the 1st October; and fears were entertained that we had all been cut off by the Indians. No word had been heard from Dr. Webb and his party, which left me at Ures on the 16th December. The parties under Mr. Gray and Lieutenant Whipple had arrived on the 10th of January.

They were compelled to suspend the survey of the Gila about sixty miles from its mouth, in consequence of shortness of provisions. They then hurried through to the Colorado, and thence across the desert to San Diego. All were in good health, though they had suffered some hardships like the rest of us. Thomas Harper, one of Lieutenant Whipple's party, was drowned in the Colorado.

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